

GenCore version 5.1.9
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OM nucleic - nucleic search, using sw model

Run on: November 7, 2006, 10:27:52 ; Search time 69 Seconds
(without alignments)
2.795 Million cell updates/sec

Title: US-10-764-316-6-COPY

Perfect score: 2743

Sequence: 1 9cgggcccgtatccattgt.....aaaaaaaaaaaaaaaaaaaaa 2743

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 1598 seqs, 35149 residues

Total number of hits satisfying chosen parameters: 3196

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1600 summaries

Database : ngsdb.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	60	2.2	60	1	ABN59221 Human spliced tran
2	60	2.2	60	2	ABN59222 Human spliced tran
3	60	2.2	60	1	ABN59220 Human spliced tran
4	60	2.2	60	1	ABN33255 Human spliced tran
5	60	2.2	60	1	ABN59048 Human spliced tran
6	54	2.0	54	1	ADC22315 Nuclear localisati
7	50	1.8	50	1	ABZ06784 Human leukocyte ge
8	50	1.8	50	1	ABZ06394 Human leukocyte ge
9	49.4	1.8	51	1	ADC17041 Human single nucle
10	49.4	1.8	51	1	ADC17040 Human single nucle
11	48.4	1.8	50	1	ABZ00091 Human leukocyte ge
12	48.4	1.8	50	1	ABZ02139 Human leukocyte ge
13	48.4	1.8	50	1	ABZ00089 Human leukocyte ge
14	35	1.3	35	1	ADL33738 LNA capture probe
15	35	1.3	35	1	AEAl6041 Cy3-labeled polynu
16	35	1.3	35	1	AE86826 Novel solid phase-
17	35	1.3	35	1	AEF94731 Optical DNA analys
18	35	1.3	38	1	AAZ57404 Hepatitis C virus
19	35	1.3	39	1	ADN35261 Probe sequence use
20	35	1.3	40	1	AAQ25031 Oligonucleotide sp
21	35	1.3	40	1	AAQ39649 Primer used in con
22	35	1.3	40	1	ADH56159 Oligonucleotide pr
23	35	1.3	40	1	ADH76858 Probe related to t
24	35	1.3	40	1	ADK70561 Nucleic acid sequ
25	35	1.3	40	1	ADK67293 RNA sequence targ
26	35	1.3	40	1	ADK67292 DNA probe used for
27	35	1.3	40	1	ADJ71299 Method of analysin
28	35	1.3	40	1	ADL71382 Labelled DNA oligo
29	35	1.3	40	1	ADL71383 Labelled DNA oligo
30	35	1.3	40	1	ADL78812 Labelled DNA oligo
31	35	1.3	40	1	ADM16960 Probe immobilised
32	35	1.3	40	1	ADN35256 Probe sequence use
33	35	1.3	40	1	ADN35263 Probe sequence use

34	35	1.3	40	1	ADN35257 Target sequence of
35	35	1.3	40	1	ADN35264 Probe sequence use
36	35	1.3	40	1	ADN35265 Target sequence of
37	35	1.3	40	1	AED51679 Modified nucleic a
38	35	1.3	40	1	AED51678 Modified nucleic a
39	35	1.3	40	1	AED68744 4omer poly-A detec
40	35	1.3	40	1	AEF24436 PolyA target sequ
41	35	1.3	40	1	AEF05826 4omer poly A DNA s
42	35	1.3	41	1	ADN35262 Probe sequence use
43	35	1.3	41	1	ADO41099 Human cDNA probe u
44	35	1.3	43	1	AAD17216 Human mRNA hybridi
45	34	1.2	34	1	AE832851 NS5B genotype 2b R
46	34	1.2	34	1	AE86391 Reverse primer use
47	34	1.2	36	1	ABK99272 Hepatitis C virus
48	34	1.2	36	1	AAD27116 RNA template, AA u
49	34	1.2	38	1	AAL07487 Human reproductive
50	33.6	1.2	40	1	AAD041321 Human cDNA probe u
51	33.2	1.2	40	1	ABN89412 Polymorphism detec
52	33	1.2	33	1	AAF29153 PCR primer SEQ ID
53	33	1.2	33	1	ADS19106 Multisignal labeli
54	33	1.2	36	1	ABK99273 Hepatitis C virus
55	33	1.2	36	1	AAD27117 RNA template, AU u
56	32.4	1.2	37	1	AAD27125 RNA template, (AU)
57	32	1.2	32	1	AAAN70278 Sequence of scissi
58	32	1.2	32	1	AAAN92244 SS probe MRCO68.
59	32	1.2	32	1	ADC33445 Template oligonuc
60	32	1.2	40	1	AAZ98722 PCR primer used fo
61	31.8	1.2	39	1	AAV12483 Oligonucleotide SE
62	31.8	1.2	39	1	AAV30019 Multimer SEQ ID NO
63	31.2	1.1	39	1	AD132816 3' flanking RNA of
64	31	1.1	31	1	AAI30705 Human single nucle
65	31	1.1	31	1	AE86835 Novel solid phase-
66	31	1.1	31	1	AE86830 Novel solid phase-
67	31	1.1	31	1	AE86829 Novel solid phase-
68	31	1.1	31	1	AE86846 Novel solid phase-
69	31	1.1	31	1	AE86851 Novel solid phase-
70	31	1.1	31	1	AE86845 Oligonucleotide Cy
71	31	1.1	31	1	AEF12155 Optical DNA analys
72	31	1.1	31	1	AEF94772 Optical DNA analys
73	31	1.1	31	1	AEF94773 Optical DNA analys
74	31	1.1	31	1	AEF94778 Optical DNA analys
75	31	1.1	31	1	AEF94756 Optical DNA analys
76	31	1.1	31	1	AEF94757 Optical DNA analys
77	31	1.1	31	1	AEF94762 Optical DNA analys
78	31	1.1	31	1	AEF94718 Optical DNA analys
79	31	1.1	31	1	AEF94723 Optical DNA analys
80	31	1.1	31	1	AEF94717 Optical DNA analys
81	31	1.1	33	1	ADU05084 Homopolymer tail w
82	31	1.1	33	1	ADU83547 Trichomonas vagina
83	31	1.1	33	1	ADV91960 Prostata cancer sp
84	30.8	1.1	34	1	AAT93827 Antitumoural phosph
85	30.8	1.1	37	1	AAAD27124 RNA template, (AU)
86	30.6	1.1	31	1	AAAT79196 Human genomic DNA
87	30.6	1.1	31	1	AAAT79197 Human genomic DNA
88	30.6	1.1	31	1	AAAT79195 Human genomic DNA
89	30.6	1.1	31	1	AAAT79199 Human genomic DNA
90	30.6	1.1	31	1	AAAT79193 Human genomic DNA
91	30.6	1.1	31	1	AAAT79198 Human genomic DNA
92	30.6	1.1	31	1	AAAT79194 Human genomic DNA
93	30.6	1.1	31	1	ACD43584 Human gene single
94	30.4	1.1	32	1	ACF04897 Human beta-actin g
95	30.2	1.1	31	1	AAAI7761 Oligo d(T) PCR pri
96	30.2	1.1	31	1	AE864867 cdNA first strand
97	30.2	1.1	32	1	AAAS09500 SMART PCR primer #
98	30.2	1.1	32	1	ABA01204 Mamushi fibrinolyt
99	30	1.1	30	1	AAAN70277 Sequence of scissi
100	30	1.1	30	1	AAAN92243 SS probe MRCO64.
101	30	1.1	30	1	AAQ36302 GST3anti, for GSTp
102	30	1.1	30	1	AAQ36301 GST3par, for GSTpi
103	30	1.1	30	1	AAQ57020 WO9923258 oligonuc
104	30	1.1	30	1	AAF99889 Immunostimulatory
105	30	1.1	30	1	AAF99888 Immunostimulatory
106	30	1.1	30	1	ABK10416 Synthetic primer s

C 107	30	1.1	30	1	ABK10412	Synthetic primer s	C 180	26	0.9	26	1	ABZ24784	Oligodeoxynucleic
C 108	30	1.1	30	1	ABK70490	In-situ analysis s	C 181	26	0.9	26	1	ABX93599	Human zsig63 PCR/s
C 109	30	1.1	30	1	ABK53961	Method of measurin	C 182	26	0.9	26	1	ACA62282	Oligo (dT) primer
C 110	30	1.1	30	1	ADU07154	Oligonucleotide #2	C 183	26	0.9	26	1	ADH44608	Human cDNA encodin
C 111	30	1.1	30	1	ADV98265	Microarray associa	C 184	26	0.9	26	1	ADI00944	Sequencing primer
C 112	30	1.1	30	1	AEP67969	Staphylococcus aur	C 185	26	0.9	26	1	ADO47862	Gene expression in
C 113	30	1.1	30	1	AEP67958	Methicillin resist	C 186	26	0.9	26	1	ADP19767	Human zalphall lig
C 114	30	1.1	30	1	AE866839	Novel solid phase-	C 187	26	0.9	26	1	ADQ80457	Da(26) biotin prim
C 115	30	1.1	30	1	AE866831	Novel solid phase-	C 188	26	0.9	26	1	ADV96391	Human zalphall lig
C 116	30	1.1	30	1	AE866833	Novel solid phase-	C 189	26	0.9	26	1	ADV96857	Human zsig63 cDNA
C 117	30	1.1	30	1	AE866833	Novel solid phase-	C 190	26	0.9	26	1	AE86842	Novel solid phase-
C 118	30	1.1	30	1	AE866847	Novel solid phase-	C 191	26	0.9	26	1	AE86842	Novel solid phase-
C 119	30	1.1	30	1	AE866847	Novel solid phase-	C 192	26	0.9	26	1	AE86844	Novel solid phase-
C 120	30	1.1	30	1	AEF12156	Oligonucleotide dT	C 193	26	0.9	26	1	AE86858	Oligonucleotide dA
C 121	30	1.1	30	1	AEF94776	Optical DNA analys	C 194	26	0.9	26	1	AEF12154	Optical DNA analys
C 122	30	1.1	30	1	AEF94774	Optical DNA analys	C 195	26	0.9	26	1	AEF94771	Optical DNA analys
C 123	30	1.1	30	1	AEF94782	Optical DNA analys	C 196	26	0.9	26	1	AEF94785	Optical DNA analys
C 124	30	1.1	30	1	AEF94758	Optical DNA analys	C 197	26	0.9	26	1	AEF94769	Optical DNA analys
C 125	30	1.1	30	1	AEF94760	Optical DNA analys	C 198	26	0.9	26	1	AEF94755	Optical DNA analys
C 126	30	1.1	30	1	AEF94766	Optical DNA analys	C 199	26	0.9	26	1	AEF94730	Optical DNA analys
C 127	30	1.1	30	1	AEF94719	Optical DNA analys	C 200	26	0.9	26	1	AEF94716	Optical DNA analys
C 128	30	1.1	30	1	AEF94727	Optical DNA analys	C 201	26	0.9	26	1	AAV71935	Anchored poly T RT
C 129	30	1.1	30	1	AEF94721	Optical DNA analys	C 202	25.8	0.9	29	1	AAV59216	Linear multimer pr
C 130	30	1.1	30	1	AAH88521	Optical DNA analys	C 203	25.8	0.9	29	1	ADC65873	DNA oligonucleotid
C 131	30	1.1	33	1	ADL33740	Conus stercusmusca	C 204	25.8	0.9	29	1	ADO81065	Cow prion protein
C 132	29	1.1	35	1	AAQ05003	LNA capture probe	C 205	25.8	0.9	30	1	ADO81069	Cow prion protein
C 133	29	1.1	29	1	ADO81147	Prion protein poly	C 206	25.8	0.9	30	1	AAQ813940	Oligonucleotide cl
C 134	29	1.1	29	1	ADS19107	Multisignal labeli	C 207	25.8	0.9	30	1	AAF60462	Oligonucleotide cl
C 135	29	1.1	29	1	ADU07155	3'-amino oligonucl	C 208	25.8	0.9	30	1	ADA26181	Rice semi-dwarf (s
C 136	28.8	1.0	33	1	ADH70631	Human Vbeta gene r	C 209	25.6	0.9	32	1	AAQ87894	Normalised library
C 137	27.2	1.0	33	1	ABQ80395	Probe APC 1-MUT.	C 210	25.4	0.9	27	1	ADG83852	EST polymorphic DN
C 138	27.2	1.0	33	1	ADX44838	Gold nanoparticle	C 211	25.4	0.9	27	1	ADG83852	Primer for cDNA sy
C 139	27.2	1.0	33	1	AED67931	Human mutant APC 1	C 212	25.2	0.9	26	1	AA520595	Human zsig63 cDNA
C 140	27	1.0	27	1	AAH70281	Sequence of scissi	C 213	25.2	0.9	26	1	AA52837	Human secreted sal
C 141	27	1.0	27	1	AAH70274	Sequence of scissi	C 214	25.2	0.9	26	1	AA45054	ZC7231 primer used
C 142	27	1.0	27	1	AAH92240	SS probe MRCO46.	C 215	25.2	0.9	26	1	ACF36382	Human zsig63 PCR/s
C 143	27	1.0	27	1	AAH92247	SS probe MRCO71.	C 216	25.2	0.9	26	1	ACF36382	Nucleotide sequenc
C 144	27	1.0	27	1	AAQ40854	DNA sequence used	C 217	25.2	0.9	26	1	AD55692	Bovine viral diarr
C 145	27	1.0	27	1	AAH99706	Immunostimulatory	C 218	25.2	0.9	26	1	ADY96856	Human zsig63 cDNA
C 146	27	1.0	27	1	ABH78427	Angiogenesis inhib	C 219	25.2	0.9	27	1	AEQ76254	Murine SCCE 5'-RAC
C 147	27	1.0	27	1	ABL39406	Immunostimulatory	C 220	25.2	0.9	27	1	AEQ76254	Tea tree tubulin o
C 148	27	1.0	27	1	ABK66592	Human gene specifi	C 221	25	0.9	25	1	AAQ95960	Oligonucleotide bi
C 149	27	1.0	27	1	ACH03245	Immunostimulatory	C 222	25	0.9	25	1	AA339306	Rapid capture prob
C 150	27	1.0	27	1	ADH37208	Immunostimulatory	C 223	25	0.9	25	1	AA339306	Capture probe Cp12
C 151	27	1.0	27	1	ADH37208	Immunostimulatory	C 224	25	0.9	25	1	AA339306	Example oligonucle
C 152	27	1.0	27	1	ADU90227	Allergic response	C 225	25	0.9	25	1	ABK49986	Oligonucleotide of
C 153	27	1.0	27	1	AED75671	Immunostimulatory	C 226	25	0.9	25	1	AD54009	Oligonucleotide of
C 154	27	1.0	29	1	AAV15487	PR-1 promoter prim	C 227	25	0.9	25	1	ADF39737	Target DNA sequenc
C 155	27	1.0	29	1	AAH43315	RNA-protein fusion	C 228	25	0.9	25	1	ADF39737	Prior protein poly
C 156	27	1.0	29	1	AAH00066	Synthetic branched	C 229	25	0.9	25	1	AD39736	Fluorophore-label
C 157	27	1.0	29	1	AAH20990	C-myc epitope puro	C 230	25	0.9	25	1	AD39736	Fluorophore-label
C 158	27	1.0	29	1	AAH98637	S cerevisiae alpha	C 231	25	0.9	25	1	AD39736	Fluorophore-label
C 159	27	1.0	30	1	AAH48087	Oligonucleotide 30	C 232	25	0.9	25	1	AD86469	DNA hybridization
C 160	27	1.0	30	1	ADV75117	Nucleic acid const	C 233	25	0.9	25	1	AD86469	Fluorescently-labe
C 161	27	1.0	32	1	ABN83375	Mononucleotide rep	C 234	25	0.9	26	1	AE826391	Human BS124 specifi
C 162	27	1.0	32	1	ADH35222	Probe #1 of the in	C 235	25	0.9	26	1	AE826391	Human pancreatic p
C 163	26.8	1.0	30	1	ABLJ5101	Phosphorothioate s	C 236	25	0.9	26	1	AAH78723	Human zsig63 cDNA
C 164	26.6	1.0	27	1	AAH32469	M. tuberculosis rp	C 237	25	0.9	26	1	AAH78723	Scaffold oligonucl
C 165	26.2	1.0	27	1	ABX12469	Coxsackie B virus	C 238	25	0.9	26	1	ADH44609	LS147-specific pol
C 166	26.2	1.0	31	1	ADO81070	Cow prion protein	C 239	25	0.9	26	1	ADH44609	Human cDNA encodin
C 167	26	0.9	26	1	AAH70276	Sequence of scissi	C 240	25	0.9	26	1	AD100945	Sequencing primer
C 168	26	0.9	26	1	AAH70275	SS probe MRCO59.	C 241	25	0.9	26	1	AD100945	Human zalphall lig
C 169	26	0.9	26	1	AAH92241	SS probe MRCO60.	C 242	25	0.9	26	1	AD100945	Human zalphall lig
C 170	26	0.9	26	1	AAH92242	CDNA library produ	C 243	25	0.9	26	1	AD100945	Universal primer S
C 171	26	0.9	26	1	AAH7536	Human full length	C 244	25	0.9	26	1	AD100945	Nucleotide sequenc
C 172	26	0.9	26	1	AAH7536	Primer #4. Uniden	C 245	25	0.9	27	1	AAH71936	Anchored poly T RT
C 173	26	0.9	26	1	AAH7536	Human zsig63 cDNA	C 246	25	0.9	27	1	AAH71936	Human androgen rec
C 174	26	0.9	26	1	AAH7536	Human secreted sal	C 247	25	0.9	27	1	AAH71936	Human ARCAP associ
C 175	26	0.9	26	1	ABH52638	Human gene specifi	C 248	25	0.9	27	1	ABH52638	RT-PCR primer olig
C 176	26	0.9	26	1	ABH66591	Human gene specifi	C 249	25	0.9	27	1	ABH66591	Duo binding molety
C 177	26	0.9	26	1	AAH45055	ZC764a primer use	C 250	25	0.9	27	1	ADH51048	Mononucleotide rep
C 178	26	0.9	26	1	AAH20671	Human zalphall lig	C 251	25	0.9	29	1	ADH51048	Cow prion protein
C 179	26	0.9	26	1	AAH43853	Primer #2 used to	C 252	24.8	0.9	28	1	ADH51048	

C 253	24.2	0.9	26	1	ADO30495	5' RACE PCR primer	326	22.4	0.8	25	1	AA34264	Human CYP2D6 gene
C 254	24	0.9	24	1	AA9286	POLYA, a competitor	327	22.2	0.8	23	1	AA57030	Murine VE-PTP codi
C 255	24	0.9	24	1	AA31743	Nucleotide sequence	328	22	0.8	22	1	AA64724	2',5'-linked tetra
C 256	24	0.9	24	1	AA04086	Oligonucleotide PO	329	22	0.8	22	1	AA71413	L1 cleavage site r
C 257	24	0.9	24	1	AAA40359	pBluescriptSK+ pha	330	22	0.8	22	1	AD12348	L1 retrotransposon
C 258	24	0.9	24	1	AAA40353	pBluescriptSK+ pha	331	22	0.8	22	1	AD25630	Junction-specific
C 259	24	0.9	24	1	AA99756	Immunostimulatory	332	22	0.8	23	1	AA30430	Oligomer IL6803 fo
C 260	24	0.9	24	1	AA99756	Immunostimulatory	333	22	0.8	23	1	AA30431	Oligomer IL6804 fo
C 261	24	0.9	24	1	AA99757	Immunostimulatory	334	22	0.8	23	1	ABL01773	Human MSH2 (hMSH2)
C 262	24	0.9	24	1	ABV14842	Human prostate exp	335	22	0.8	24	1	ADY85941	RT-PCR primer used
C 263	24	0.9	24	1	ABS78477	Angiogenesis inhib	336	22	0.8	26	1	AD12409	L1 retrotransposon
C 264	24	0.9	24	1	ABS77949	Angiogenesis inhib	337	21.8	0.8	25	1	ABK6170	Oligo dT primer #3
C 265	24	0.9	24	1	ABS78478	Angiogenesis inhib	338	21.8	0.8	25	1	AD081056	Cow prion protein
C 266	24	0.9	24	1	ABL39405	Immunostimulatory	339	21.8	0.8	25	1	AD081061	Gastric acid produ
C 267	24	0.9	24	1	ABA98840	A24 oligonucleotid	340	21.8	0.8	26	1	AA16616	Electrophoresis ap
C 268	24	0.9	24	1	AA517869	A24 oligonucleotid	341	21.4	0.8	23	1	ADT55094	Electrophoresis ap
C 269	24	0.9	24	1	ABK15639	RNA-PCR procedure	342	21.4	0.8	23	1	ADT55095	Electrophoresis ap
C 270	24	0.9	24	1	ABK15639	Immunostimulatory	343	21.4	0.8	23	1	ADT55095	Electrophoresis ap
C 271	24	0.9	24	1	ACB80181	Oligo (dT)24 RT-PC	344	21.4	0.8	24	1	AA166361	Human phosphatidyl
C 272	24	0.9	24	1	ACA62284	Immunostimulatory	345	21.4	0.8	24	1	AA166361	Human phosphatidyl
C 273	24	0.9	24	1	ACH03285	Immunostimulatory	346	21.4	0.8	24	1	ADG16131	Compound activity
C 274	24	0.9	24	1	ACH03284	Immunostimulatory	347	21.4	0.8	24	1	ADG16127	Compound activity
C 275	24	0.9	24	1	ADA66379	mRNA poly A. Unid	348	21	0.8	21	1	AA075712	Reverse transcript
C 276	24	0.9	24	1	ADB37258	Immunostimulatory	349	21	0.8	21	1	AAZ26973	Primer used to rev
C 277	24	0.9	24	1	ADB36806	Immunostimulatory	350	21	0.8	21	1	AAZ26973	Protein kinase inh
C 278	24	0.9	24	1	ADB37259	Immunostimulatory	351	21	0.8	21	1	AAZ26973	Human ku autoantig
C 279	24	0.9	24	1	ADD31867	Butterfly biliverd	352	21	0.8	21	1	AA03631	Immunostimulatory
C 280	24	0.9	24	1	ADE25524	Rolling circle amp	353	21	0.8	21	1	AAH42480	Oligonucleotide us
C 281	24	0.9	24	1	AA026664	Immunostimulatory	354	21	0.8	21	1	AAH45788	Human KUAPP70 gene
C 282	24	0.9	24	1	ACA58802	Gastric ulcer trea	355	21	0.8	21	1	ABS78428	Angiogenesis inhib
C 283	24	0.9	24	1	ADG75917	Non-CpG DNA oligo	356	21	0.8	21	1	ABL39404	Immunostimulatory
C 284	24	0.9	24	1	ADR48246	Microarray synthe	357	21	0.8	21	1	AA51323	Immunostimulatory
C 285	24	0.9	24	1	ADU82429	Microarray synthe	358	21	0.8	21	1	ACH03246	Regular oligo dT p
C 286	24	0.9	24	1	ADU90278	Allergic response	359	21	0.8	21	1	ADB37209	Immunostimulatory
C 287	24	0.9	24	1	ADU90277	Allergic response	360	21	0.8	21	1	ADC24379	PCR primer for amp
C 288	24	0.9	24	1	ADU89749	Allergic response	361	21	0.8	21	1	ADC24379	Rat DNA microarray
C 289	24	0.9	24	1	ADV86472	Fluorophore-label	362	21	0.8	21	1	ADK01341	Rat DNA microarray
C 290	24	0.9	24	1	ADW99566	Rolling replicatio	363	21	0.8	21	1	ADK01330	Rat DNA microarray
C 291	24	0.9	24	1	AED75279	Immunostimulatory	364	21	0.8	21	1	ADK01288	Rat DNA microarray
C 292	24	0.9	24	1	AED75711	Immunostimulatory	365	21	0.8	21	1	ADM96310	Human Atp5F1 gene,
C 293	24	0.9	24	1	AED75710	Immunostimulatory	366	21	0.8	21	1	ADJ88057	RT primer used in
C 294	24	0.9	24	1	AAV42215	Sequencing primer	367	21	0.8	21	1	ADM07216	Control primer use
C 295	24	0.9	24	1	AAH42258	PCR primer for hum	368	21	0.8	21	1	ADU90228	Allergic response
C 296	24	0.9	24	1	AAH42260	PCR primer for hum	369	21	0.8	21	1	ADV94812	Human glycosyltran
C 297	24	0.9	24	1	ACF79235	Calix(a)arene-olig	370	21	0.8	21	1	ADV94812	Fluorophore-label
C 298	24	0.9	24	1	AEA31163	Murine DNA oligonu	371	21	0.8	21	1	ADV86473	Oligonucleotide DS
C 299	24	0.9	24	1	AEA31164	Murine DNA oligonu	372	21	0.8	21	1	ADW71577	Oligonucleotide DS
C 300	24	0.9	24	1	AEA31162	Murine DNA oligonu	373	21	0.8	21	1	ADY26140	Varola DNA bindin
C 301	24	0.9	24	1	AEC63371	Oligonucleotide of	374	21	0.8	21	1	ADZ98948	Human KU70 transcr
C 302	24	0.9	24	1	AAA40358	pBluescriptSK+ pha	375	21	0.8	21	1	ADZ98948	Human KU70 transcr
C 303	24	0.9	24	1	AAA40362	pBluescriptSK+ pha	376	21	0.8	21	1	ADZ98950	Human KU70 transcr
C 304	23.8	0.9	28	1	AAA57856	Deoxy-T22-tagged s	377	21	0.8	21	1	AED13306	Oligonucleotide #8
C 305	23.8	0.9	29	1	AA44903	Triplex forming ol	378	21	0.8	21	1	AED75672	Immunostimulatory
C 306	23.4	0.9	26	1	AAV12482	Oligonucleotide SE	379	21	0.8	21	1	AEF40261	Poly A DNA sequenc
C 307	23.4	0.9	26	1	AAV59215	Circular template	380	21	0.8	23	1	AAQ30432	Oligomer IL6805 fo
C 308	23.4	0.9	26	1	AA300018	Precircle DNA olig	381	21	0.8	24	1	AAZ29753	Synthetic oligonuc
C 309	23.2	0.8	24	1	ADC65872	DNA oligonucleotid	382	21	0.8	24	1	ABK86169	Oligo dT primer #2
C 310	23.2	0.8	24	1	ABK48140	Aspergillus niger	383	21	0.8	24	1	ABK86168	Oligo dT primer #1
C 311	23.2	0.8	25	1	AEB90558	Thielavia terrestr	384	21	0.8	26	1	ADZ26899	Bacterial PNP DNA
C 312	23.2	0.8	28	1	ADG76060	Non-CpG DNA oligon	385	21	0.8	26	1	ADZ39650	PolyPNP out-of-fra
C 313	23.2	0.8	28	1	ADG75972	Immunostimulatory	386	20.8	0.8	26	1	ADX99080	Extend primer 57 u
C 314	23	0.8	23	1	AAC62450	Cleavage of nuclei	387	20.8	0.8	24	1	AAH24266	Human phosphatase
C 315	23	0.8	23	1	AAC62451	Cleavage of nuclei	388	20.8	0.8	24	1	ABL55130	Human gonadotropin
C 316	23	0.8	23	1	ADT55093	Electrophoresis ap	389	20.4	0.7	24	1	ADY03038	Extend primer 488
C 317	23	0.8	23	1	ADT55098	Electrophoresis ap	390	20.4	0.7	25	1	ADG75918	Immunostimulatory
C 318	23	0.8	24	1	ADG16129	Compound activity	391	20.4	0.7	25	1	ADZ23535	fragment of a plas
C 319	23	0.8	24	1	ADY79809	EST polymorphic DN	392	20.2	0.7	25	1	AAZ44220	Caenorhabditis ele
C 320	23	0.8	24	1	ADF12405	L1 retrotransposon	393	20.2	0.7	22	1	AAZ50570	Molecular array pr
C 321	23	0.8	25	1	AAH38515	SNP specific SNPE	394	20.2	0.7	22	1	ACC48484	Locked nucleic aci
C 322	23	0.8	25	1	AAH38515	Human haemoglobin	395	20.2	0.7	22	1	ACC48485	Locked nucleic aci
C 323	22.8	0.8	26	1	AA793819	Antitumoural phosph	396	20.2	0.7	22	1	AAZ51324	Locked nucleic aci
C 324	22.4	0.8	24	1	ADG16126	Compound activity	397	20.2	0.7	22	1	AAZ51324	Anchored oligo dT
C 325	22.4	0.8	24	1	AED81269	IL-10 expression a	398	20.2	0.7	22	1	ABX74887	Human RP-11-336A10

545	20	0.7	20	1	ABD26880	AA278764-derived o	c 618	20	0.7	20	1	ADU89542	Allergic response
546	20	0.7	20	1	ABD24850	AI092623-derived o	c 619	20	0.7	20	1	ACL79852	Oligo (dtr)20 rever
547	20	0.7	20	1	ABD25532	AI125651-derived o	c 620	20	0.7	20	1	ADU50993	Oligonucleotide of
548	20	0.7	20	1	ABD25046	AI128305-derived o	621	20	0.7	20	1	ADV94811	Human glycosyltrai
549	20	0.7	20	1	ABD25044	AI128305-derived o	622	20	0.7	20	1	ADM02146	Target RNA detecti
550	20	0.7	20	1	ABD25111	AI125228-derived o	c 623	20	0.7	20	1	ADM02147	Target RNA detecti
551	20	0.7	20	1	ADZ20571	Gene expression de	c 624	20	0.7	20	1	ADV86470	Fluorophore-label
552	20	0.7	20	1	ADH08684	Nanotechnology nuc	c 625	20	0.7	20	1	ADW86471	Fluorophore-label
553	20	0.7	20	1	ADH08814	Nanotechnology nuc	c 626	20	0.7	20	1	ADW44357	Human taxane discr
554	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 627	20	0.7	20	1	ADW93078	Universal Stem Cel
555	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 628	20	0.7	20	1	ADY86103	dt(20) primer used
556	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 629	20	0.7	20	1	ADY86103	Universal PCR prim
557	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 630	20	0.7	20	1	ADZ47530	Synthetic RT-PCR p
558	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 631	20	0.7	20	1	ADZ97999	Human antisease ol
559	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 632	20	0.7	20	1	ADZ98001	Human antisease ol
560	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 633	20	0.7	20	1	ADZ98001	Human antisease ol
561	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 634	20	0.7	20	1	ADZ98000	Human antisease ol
562	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 635	20	0.7	20	1	ADZ98000	Human antisease ol
563	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 636	20	0.7	20	1	ADZ98000	Human antisease ol
564	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 637	20	0.7	20	1	ADZ98000	Human antisease ol
565	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 638	20	0.7	20	1	ADZ98000	Human antisease ol
566	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 639	20	0.7	20	1	ADZ98000	Human antisease ol
567	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 640	20	0.7	20	1	ADZ98000	Human antisease ol
568	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 641	20	0.7	20	1	ADZ98000	Human antisease ol
569	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 642	20	0.7	20	1	ADZ98000	Human antisease ol
570	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 643	20	0.7	20	1	ADZ98000	Human antisease ol
571	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 644	20	0.7	20	1	ADZ98000	Human antisease ol
572	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 645	20	0.7	20	1	ADZ98000	Human antisease ol
573	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 646	20	0.7	20	1	ADZ98000	Human antisease ol
574	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 647	20	0.7	20	1	ADZ98000	Human antisease ol
575	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 648	20	0.7	20	1	ADZ98000	Human antisease ol
576	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 649	20	0.7	20	1	ADZ98000	Human antisease ol
577	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 650	20	0.7	20	1	ADZ98000	Human antisease ol
578	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 651	20	0.7	20	1	ADZ98000	Human antisease ol
579	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 652	20	0.7	20	1	ADZ98000	Human antisease ol
580	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 653	20	0.7	20	1	ADZ98000	Human antisease ol
581	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 654	20	0.7	20	1	ADZ98000	Human antisease ol
582	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 655	20	0.7	20	1	ADZ98000	Human antisease ol
583	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 656	20	0.7	20	1	ADZ98000	Human antisease ol
584	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 657	20	0.7	20	1	ADZ98000	Human antisease ol
585	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 658	20	0.7	20	1	ADZ98000	Human antisease ol
586	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 659	20	0.7	20	1	ADZ98000	Human antisease ol
587	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 660	20	0.7	20	1	ADZ98000	Human antisease ol
588	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 661	20	0.7	20	1	ADZ98000	Human antisease ol
589	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 662	20	0.7	20	1	ADZ98000	Human antisease ol
590	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 663	20	0.7	20	1	ADZ98000	Human antisease ol
591	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 664	20	0.7	20	1	ADZ98000	Human antisease ol
592	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 665	20	0.7	20	1	ADZ98000	Human antisease ol
593	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 666	20	0.7	20	1	ADZ98000	Human antisease ol
594	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 667	20	0.7	20	1	ADZ98000	Human antisease ol
595	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 668	20	0.7	20	1	ADZ98000	Human antisease ol
596	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 669	20	0.7	20	1	ADZ98000	Human antisease ol
597	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 670	20	0.7	20	1	ADZ98000	Human antisease ol
598	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 671	20	0.7	20	1	ADZ98000	Human antisease ol
599	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 672	20	0.7	20	1	ADZ98000	Human antisease ol
600	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 673	20	0.7	20	1	ADZ98000	Human antisease ol
601	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 674	20	0.7	20	1	ADZ98000	Human antisease ol
602	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 675	20	0.7	20	1	ADZ98000	Human antisease ol
603	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 676	20	0.7	20	1	ADZ98000	Human antisease ol
604	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 677	20	0.7	20	1	ADZ98000	Human antisease ol
605	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 678	20	0.7	20	1	ADZ98000	Human antisease ol
606	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 679	20	0.7	20	1	ADZ98000	Human antisease ol
607	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 680	20	0.7	20	1	ADZ98000	Human antisease ol
608	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 681	20	0.7	20	1	ADZ98000	Human antisease ol
609	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 682	19.8	0.7	20	1	ADZ98000	Human antisease ol
610	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 683	19.8	0.7	20	1	ADZ98000	Human antisease ol
611	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 684	19.8	0.7	20	1	ADZ98000	Human antisease ol
612	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 685	19.4	0.7	20	1	ADZ98000	Human antisease ol
613	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 686	19.4	0.7	20	1	ADZ98000	Human antisease ol
614	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 687	19.4	0.7	20	1	ADZ98000	Human antisease ol
615	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 688	19.4	0.7	20	1	ADZ98000	Human antisease ol
616	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 689	19.4	0.7	20	1	ADZ98000	Human antisease ol
617	20	0.7	20	1	ADH08749	Nanotechnology nuc	c 690	19.4	0.7	20	1	ADZ98000	Human antisease ol

C 691	19.4	0.7	21	1	AA075646	Reverse transcript	C 764	19	0.7	19	1	AA081927	Polynucleotide str
C 692	19.4	0.7	21	1	AA075753	Reverse transcript	C 765	19	0.7	19	1	AA201358	PCR primer for PGI
C 693	19.4	0.7	21	1	AA075728	Reverse transcript	C 766	19	0.7	19	1	AZ261390	Uniform phosphodie
C 694	19.4	0.7	21	1	AA075680	Reverse transcript	C 767	19	0.7	19	1	AZ61404	2'-O-modified ribo
C 695	19.4	0.7	21	1	AA075716	Reverse transcript	C 768	19	0.7	19	1	AAC62422	T19 diester for us
C 696	19.4	0.7	21	1	AA075649	Reverse transcript	C 769	19	0.7	19	1	AA295241	Modified oligonucle
C 697	19.4	0.7	21	1	AA075776	Reverse transcript	C 770	19	0.7	19	1	AA295240	Modified oligonucle
C 698	19.4	0.7	21	1	AA075704	Reverse transcript	C 771	19	0.7	19	1	AAA06839	Modified T-contain
C 699	19.4	0.7	21	1	AA075708	Reverse transcript	C 772	19	0.7	19	1	AAA88952	Oligonucleotide IS
C 700	19.4	0.7	21	1	AA075777	Reverse transcript	C 773	19	0.7	19	1	AAA88952	2'-Modified chimera
C 701	19.4	0.7	21	1	AA075616	Reverse transcript	C 774	19	0.7	19	1	AAA88949	Oligonucleotide IS
C 702	19.4	0.7	21	1	AA075696	Reverse transcript	C 775	19	0.7	19	1	AAA88950	Oligonucleotide IS
C 703	19.4	0.7	21	1	AA075721	Reverse transcript	C 776	19	0.7	19	1	AAA88951	Oligonucleotide IS
C 704	19.4	0.7	21	1	AA075744	Reverse transcript	C 777	19	0.7	19	1	AAA88947	Oligonucleotide IS
C 705	19.4	0.7	21	1	AA075395	HIV-1 gag protein	C 778	19	0.7	19	1	AAA88948	Oligonucleotide IS
C 706	19.4	0.7	21	1	AA242290	Complementary nucl	C 779	19	0.7	19	1	AA071630	Phosphorothioate 2
C 707	19.4	0.7	21	1	ABX79794	EST polymorphic DN	C 780	19	0.7	19	1	AAC62454	Cleavage of nuclei
C 708	19.4	0.7	21	1	ADK01309	Rat DNA microarray	C 781	19	0.7	19	1	AAF31458	Oligonucleotide IS
C 709	19.4	0.7	21	1	ADK01314	Rat DNA microarray	C 782	19	0.7	19	1	AAF31564	ISIS sequence 3232
C 710	19.4	0.7	21	1	ADK01333	Rat DNA microarray	C 783	19	0.7	19	1	AAH46460	Oligonucleotide #8
C 711	19.4	0.7	21	1	ADK01340	Rat DNA microarray	C 784	19	0.7	19	1	AAH25737	Oligonucleotide #8
C 712	19.4	0.7	21	1	ADK01284	Rat DNA microarray	C 785	19	0.7	19	1	AAH25737	Human type II RNase
C 713	19.4	0.7	21	1	ADK01293	Rat DNA microarray	C 786	19	0.7	19	1	AAH25738	Human type II RNase
C 714	19.4	0.7	21	1	ADK01328	Rat DNA microarray	C 787	19	0.7	19	1	AAH25738	2'-O-N-[2-(dimethyl
C 715	19.4	0.7	21	1	ADK01337	Rat DNA microarray	C 788	19	0.7	19	1	AAH25738	Nucleic acid quant
C 716	19.4	0.7	21	1	ADK01282	Rat DNA microarray	C 789	19	0.7	19	1	ABA91951	Methyl thioethyl m
C 717	19.4	0.7	21	1	ADK01334	Rat DNA microarray	C 790	19	0.7	19	1	ABA91950	Dimethylaminopropyl
C 718	19.4	0.7	21	1	ADK01296	Rat DNA microarray	C 791	19	0.7	19	1	ABE51520	Methoxyethoxy modi
C 719	19.4	0.7	21	1	ADK01338	Rat DNA microarray	C 792	19	0.7	19	1	ABE51520	Tailing reaction r
C 720	19.4	0.7	21	1	ADK01320	Rat DNA microarray	C 793	19	0.7	19	1	AAD42000	Oligonucleotide #3
C 721	19.4	0.7	21	1	ADK01304	Rat DNA microarray	C 794	19	0.7	19	1	AAD42002	Oligonucleotide #5
C 722	19.4	0.7	21	1	ADK01325	Rat DNA microarray	C 795	19	0.7	19	1	AAD42004	Oligonucleotide #7
C 723	19.4	0.7	21	1	ADK01292	Rat DNA microarray	C 796	19	0.7	19	1	AAD42010	Oligonucleotide #1
C 724	19.4	0.7	21	1	ADK01312	Rat DNA microarray	C 797	19	0.7	19	1	AAD42020	Oligonucleotide #2
C 725	19.4	0.7	21	1	ADK01298	Rat DNA microarray	C 798	19	0.7	19	1	AAD42001	Oligonucleotide #4
C 726	19.4	0.7	21	1	ADK01336	Rat DNA microarray	C 799	19	0.7	19	1	AAD42011	Oligonucleotide #1
C 727	19.4	0.7	21	1	ADW1579	Oligonucleotide DS	C 800	19	0.7	19	1	AAD42003	Oligonucleotide #8
C 728	19.4	0.7	21	1	ADW1578	Oligonucleotide DS	C 801	19	0.7	19	1	AAD41998	Oligonucleotide #6
C 729	19.4	0.7	21	1	AED42748	Protein interactin	C 802	19	0.7	19	1	AAD41999	Oligonucleotide #1
C 730	19.4	0.7	21	1	AAT68615	DNA probe used in	C 803	19	0.7	19	1	AAD42009	Oligonucleotide #1
C 731	19.4	0.7	24	1	AA200877	PCR primer PGR132	C 804	19	0.7	19	1	ABE59245	Modified oligomer1
C 732	19.4	0.7	24	1	ABK12409	RT-PCR primer #1 f	C 805	19	0.7	19	1	ABE99265	Synthetically modi
C 733	19.4	0.7	24	1	AB223536	fragment of a plas	C 806	19	0.7	19	1	ADH97218	Synthetically modi
C 734	19.4	0.7	24	1	ADR44221	Caenorhabditis ele	C 807	19	0.7	19	1	ADH97214	Synthetically modi
C 735	19.2	0.7	21	1	ACC48482	Locked nucleic aci	C 808	19	0.7	19	1	ADH97214	Modified oligonucle
C 736	19.2	0.7	21	1	ACC99729	Oligonucleotide.	C 809	19	0.7	19	1	ADG92485	Oligonucleotide #3
C 737	19.2	0.7	24	1	ABF98935	Immunostimulatory	C 810	19	0.7	19	1	ADG47994	Oligonucleotide #1
C 738	19.2	0.7	24	1	ABA05517	Human Tre carcinog	C 811	19	0.7	19	1	ADG47994	Oligonucleotide #5
C 739	19.2	0.7	24	1	AB877576	Angiogenesis inhib	C 812	19	0.7	19	1	ADG47998	Guanidinium functi
C 740	19.2	0.7	24	1	ABA99284	Human tra oncogene	C 813	19	0.7	19	1	ADH42933	Guanidinium functi
C 741	19.2	0.7	24	1	ABK13715	RT-PCR primer #2 f	C 814	19	0.7	19	1	ADH42931	Guanidinium functi
C 742	19.2	0.7	24	1	ACD99368	Immunostimulatory	C 815	19	0.7	19	1	ADH42932	Modified antisease
C 743	19.2	0.7	24	1	ADB36437	Immunostimulatory	C 816	19	0.7	19	1	ADJ77769	Modified antisease
C 744	19.2	0.7	24	1	ADG75925	Immunostimulatory	C 817	19	0.7	19	1	ADJ77769	Exemplary DNA mole
C 745	19.2	0.7	24	1	ADG75926	Immunostimulatory	C 818	19	0.7	19	1	ADJ77769	2'-O-MOB-2-thio mo
C 746	19.2	0.7	24	1	ADG75922	Immunostimulatory	C 819	19	0.7	19	1	ADJ77769	Oligonucleotide #4
C 747	19.2	0.7	24	1	ADG75924	Immunostimulatory	C 820	19	0.7	19	1	ADJ77769	Oligo, to illustra
C 748	19.2	0.7	24	1	ADG76001	Non-CpG DNA oligon	C 821	19	0.7	19	1	ADJ77769	Tobacco cytochrome
C 749	19.2	0.7	24	1	ADG76035	Immunostimulatory	C 822	19	0.7	19	1	ADJ77769	Hepatitis C virus
C 750	19.2	0.7	24	1	ADG75919	Immunostimulatory	C 823	19	0.7	19	1	ADJ77769	Hepatitis C virus
C 751	19.2	0.7	24	1	ADG75917	Immunostimulatory	C 824	19	0.7	19	1	ADJ77769	Hepatitis C virus
C 752	19.2	0.7	24	1	ADG75920	Immunostimulatory	C 825	19	0.7	19	1	ADJ77769	Hepatitis C virus
C 753	19.2	0.7	24	1	ADG75923	Immunostimulatory	C 826	19	0.7	19	1	ADJ77769	Hepatitis C virus
C 754	19.2	0.7	24	1	ADG75921	Immunostimulatory	C 827	19	0.7	19	1	ADJ77769	Hepatitis C virus
C 755	19.2	0.7	24	1	ADO81076	Cow prion protein	C 828	19	0.7	19	1	ADJ77769	Hepatitis C virus
C 756	19.2	0.7	24	1	ADU89376	Allergic response	C 829	19	0.7	19	1	ADJ77769	Hepatitis C virus
C 757	19.2	0.7	24	1	AED74921	Immunostimulatory	C 830	19	0.7	19	1	ADJ77769	Hepatitis C virus
C 758	19.2	0.7	24	1	AAQ75551	Reverse transcript	C 831	19	0.7	19	1	ADJ77769	Hepatitis C virus
C 759	19.2	0.7	24	1	AAQ75551	Oligonucleotide pr	C 832	19	0.7	19	1	ADJ77769	Hepatitis C virus
C 760	19.2	0.7	24	1	AAQ75551	Aminoxy-modified	C 833	19	0.7	19	1	ADJ77769	Hepatitis C virus
C 761	19.2	0.7	24	1	AAQ75551	Oligonucleotide co	C 834	19	0.7	19	1	ADJ77769	Hepatitis C virus
C 762	19.2	0.7	24	1	AAQ75551	5' amino oligonucle	C 835	19	0.7	19	1	ADJ77769	Antisense oligonuc
C 763	19.2	0.7	24	1	AAQ75551		C 836	19	0.7	19	1	ADJ77769	

c 983	18.4	0.7	21	1	AAQ75722	Reverse transcript	1056	18	0.7	18	1	AAZ87167	Deoxyarabinonucleo
c 984	18.4	0.7	21	1	AAQ75775	Reverse transcript	c1057	18	0.7	18	1	AD03565	Oligonucleotide #6
c 985	18.4	0.7	21	1	AAQ75697	Reverse transcript	c1058	18	0.7	18	1	AD17014	Oligonucleotide A1
c 986	18.4	0.7	21	1	AAQ75746	Reverse transcript	c1059	18	0.7	18	1	AAF99708	Immunostimulatory
c 987	18.4	0.7	21	1	AAQ75617	Reverse transcript	c1060	18	0.7	18	1	AAF99734	Immunostimulatory
c 988	18.4	0.7	21	1	AAQ75624	Reverse transcript	c1061	18	0.7	18	1	AAF82472	Phagemid vector pC
c 989	18.4	0.7	21	1	AAQ75698	Reverse transcript	c1062	18	0.7	18	1	AA594743	Rat secreted facto
c 990	18.4	0.7	21	1	AAQ75698	Reverse transcript	c1063	18	0.7	18	1	ABS78455	Angiogenesis inhib
c 991	18.4	0.7	21	1	AAQ75751	Reverse transcript	c1064	18	0.7	18	1	ABS78429	Angiogenesis inhib
c 992	18.4	0.7	21	1	AAQ75623	Reverse transcript	c1065	18	0.7	18	1	ABL39401	Immunostimulatory
c 993	18.4	0.7	21	1	AAQ75623	Reverse transcript	c1066	18	0.7	18	1	ABL39401	Oligonucleotide us
c 994	18.4	0.7	21	1	AAQ75645	Reverse transcript	c1067	18	0.7	18	1	AAAD41497	Poly d(T) primer.
c 995	18.4	0.7	21	1	AAQ75644	Reverse transcript	c1068	18	0.7	18	1	ABS53437	Adaptor oligonucle
c 996	18.4	0.7	21	1	AAQ75677	Reverse transcript	c1069	18	0.7	18	1	ABS32339	Target RNA #1 used
c 997	18.4	0.7	21	1	AAQ75677	Reverse transcript	c1070	18	0.7	18	1	AD56466	Antisense oligo #1
c 998	18.4	0.7	21	1	AAQ75745	Reverse transcript	c1071	18	0.7	18	1	AD56440	2'-F-ANA antisense
c 999	18.4	0.7	21	1	AAQ75772	Reverse transcript	c1072	18	0.7	18	1	AD56446	Immunostimulatory
c 1000	18.4	0.7	21	1	AAQ75647	Reverse transcript	c1073	18	0.7	18	1	ACH03247	Immunostimulatory
c 1001	18.4	0.7	21	1	AAQ75720	Reverse transcript	c1074	18	0.7	18	1	AD57878	Antisense oligo #1
c 1002	18.4	0.7	21	1	ADK01318	Rat DNA microarray	c1075	18	0.7	18	1	AD57878	Antisense DNA-RNA
c 1003	18.4	0.7	21	1	ADK01313	Rat DNA microarray	c1076	18	0.7	18	1	AD57877	Antisense DNA-RNA
c 1004	18.4	0.7	21	1	ADK01319	Rat DNA microarray	c1077	18	0.7	18	1	AD57890	Target RNA #1 used
c 1005	18.4	0.7	21	1	ADK01319	Rat DNA microarray	c1078	18	0.7	18	1	AD57890	Immunostimulatory
c 1006	18.4	0.7	21	1	ADK01302	Rat DNA microarray	c1079	18	0.7	18	1	AD57890	Immunostimulatory
c 1007	18.4	0.7	21	1	ADK01317	Rat DNA microarray	c1080	18	0.7	18	1	AD57890	Immunostimulatory
c 1008	18.4	0.7	21	1	ADK01303	Rat DNA microarray	c1081	18	0.7	18	1	AD57890	Immunostimulatory
c 1009	18.4	0.7	21	1	ADK01327	Rat DNA microarray	c1082	18	0.7	18	1	AD57890	Immunostimulatory
c 1010	18.4	0.7	21	1	ADK01316	Rat DNA microarray	c1083	18	0.7	18	1	AD57890	Immunostimulatory
c 1011	18.4	0.7	21	1	ADK01316	Rat DNA microarray	c1084	18	0.7	18	1	AD57890	Immunostimulatory
c 1012	18.4	0.7	21	1	ADK01299	Rat DNA microarray	c1085	18	0.7	18	1	AD57890	Immunostimulatory
c 1013	18.4	0.7	21	1	ADK01301	Rat DNA microarray	c1086	18	0.7	18	1	AD57890	Immunostimulatory
c 1014	18.4	0.7	21	1	ADK01315	Rat DNA microarray	c1087	18	0.7	18	1	AD57890	Immunostimulatory
c 1015	18.4	0.7	21	1	ADK01326	Rat DNA microarray	c1088	18	0.7	18	1	AD57890	Immunostimulatory
c 1016	18.4	0.7	21	1	ADK01300	Rat DNA microarray	c1089	18	0.7	18	1	AD57890	Immunostimulatory
c 1017	18.4	0.7	21	1	ADK01310	Rat DNA microarray	c1090	18	0.7	18	1	AD57890	Immunostimulatory
c 1018	18.4	0.7	21	1	ADK01311	Rat DNA microarray	c1091	18	0.7	18	1	AD57890	Immunostimulatory
c 1019	18.4	0.7	22	1	ABA93238	PolyA adaptor olig	c1092	18	0.7	18	1	AD57890	Immunostimulatory
c 1020	18.4	0.7	23	1	AAQ75028	LCR oligo 2. Synt	c1093	18	0.7	18	1	AD57890	Immunostimulatory
c 1021	18.4	0.7	23	1	AAQ75029	LCR oligo 3. Synt	c1094	18	0.7	18	1	AD57890	Immunostimulatory
c 1022	18.2	0.7	19	1	AAQ06572	(-)-limonene-6-hyd	c1095	18	0.7	18	1	AD57890	Immunostimulatory
c 1023	18.2	0.7	19	1	AAQ299489	Primer HOOK for cD	c1096	18	0.7	18	1	AD57890	Immunostimulatory
c 1024	18.2	0.7	19	1	AAQ15201	3' sequencing prim	c1097	18	0.7	18	1	AD57890	Immunostimulatory
c 1025	18.2	0.7	19	1	AAH21968	Mouse total gene e	c1098	18	0.7	18	1	AD57890	Immunostimulatory
c 1026	18.2	0.7	19	1	AAH21968	Spearmint (-)-limo	c1099	18	0.7	18	1	AD57890	Immunostimulatory
c 1027	18.2	0.7	19	1	AAH21968	Mouse microglia an	c1100	18	0.7	18	1	AD57890	Immunostimulatory
c 1028	18.2	0.7	19	1	ABK71509	CNS related 3' seq	c1101	18	0.7	18	1	AD57890	Immunostimulatory
c 1029	18.2	0.7	19	1	ABQ73231	Rabbit atheroscler	c1102	18	0.7	18	1	AD57890	Immunostimulatory
c 1030	18.2	0.7	19	1	ADQ34663	PCR primer #4 used	c1103	18	0.7	18	1	AD57890	Immunostimulatory
c 1031	18.2	0.7	19	1	ADQ40279	HOOK PCR primer us	c1104	18	0.7	18	1	AD57890	Immunostimulatory
c 1032	18.2	0.7	19	1	ABZ68389	Reverse transcript	c1105	18	0.7	18	1	AD57890	Immunostimulatory
c 1033	18.2	0.7	19	1	ACC79402	M13 sequencing pri	c1106	18	0.7	18	1	AD57890	Immunostimulatory
c 1034	18.2	0.7	19	1	AAQ49149	3' sequencing prim	c1107	18	0.7	18	1	AD57890	Immunostimulatory
c 1035	18.2	0.7	19	1	AAQ50267	3' sequencing prim	c1108	18	0.7	18	1	AD57890	Immunostimulatory
c 1036	18.2	0.7	19	1	ADC21495	Human PRDI-BF1 RT-	c1109	18	0.7	18	1	AD57890	Immunostimulatory
c 1037	18.2	0.7	19	1	ADQ74670	DNA oligo (30) use	c1110	18	0.7	18	1	AD57890	Immunostimulatory
c 1038	18.2	0.7	19	1	ADL24850	Intestinal epithel	c1111	18	0.7	18	1	AD57890	Immunostimulatory
c 1039	18.2	0.7	19	1	ADY39466	RT-PCR primer used	c1112	18	0.7	18	1	AD57890	Immunostimulatory
c 1040	18.2	0.7	19	1	ADZ66610	Non-viable seed-pr	c1113	18	0.7	18	1	AD57890	Immunostimulatory
c 1041	18.2	0.7	19	1	AEC21688	Oligo d(T) primer,	c1114	18	0.7	18	1	AD57890	Immunostimulatory
c 1042	18.2	0.7	19	1	AED19813	Oligo(dT)18 primer	c1115	18	0.7	18	1	AD57890	Immunostimulatory
c 1043	18.2	0.7	19	1	AED21472	Primer d(T)18, SEQ	c1116	18	0.7	18	1	AD57890	Immunostimulatory
c 1044	18.2	0.7	19	1	AED60795	Synthetic primer #	c1117	18	0.7	18	1	AD57890	Immunostimulatory
c 1045	18.2	0.7	19	1	AED87374	Plant promoter ass	c1118	18	0.7	18	1	AD57890	Immunostimulatory
c 1046	18.2	0.7	19	1	AEF26613	Oligo(dT)18 primer	c1119	18	0.7	18	1	AD57890	Immunostimulatory
c 1047	18	0.7	20	1	AAZ09197	Oligonucleotide 9	c1120	18	0.7	18	1	AD57890	Immunostimulatory
c 1048	18	0.7	18	1	AAQ34110	Sequence of a micr	c1121	18	0.7	18	1	AD57890	Immunostimulatory
c 1049	18	0.7	18	1	AAQ75025	PCR primer. Synt	c1122	18	0.7	18	1	AD57890	Immunostimulatory
c 1050	18	0.7	18	1	AAQ75025	Anchored poly(T) o	c1123	18	0.7	18	1	AD57890	Immunostimulatory
c 1051	18	0.7	18	1	AAQ21970	Nuclease resistant	c1124	18	0.7	18	1	AD57890	Immunostimulatory
c 1052	18	0.7	18	1	AAQ19943	Primer SEQ ID NO:3	c1125	18	0.7	18	1	AD57890	Immunostimulatory
c 1053	18	0.7	18	1	AAQ19942	Primer SEQ ID NO:2	c1126	18	0.7	18	1	AD57890	Immunostimulatory
c 1054	18	0.7	18	1	AAZ87161	Deoxyarabinonucleo	c1127	18	0.7	18	1	AD57890	Immunostimulatory
c 1055	18	0.7	18	1	AAZ87162	Deoxyarabinonucleo	c1128	18	0.7	18	1	AD57890	Immunostimulatory
c 1056	18	0.7	20	1	AAZ87166	Deoxyarabinonucleo	c1129	18	0.7	18	1	AD57890	Immunostimulatory

c1129	18	0.7	20	1	AAQ75583	Reverse transcript	c1202	17.8	0.6	21	1	AAQ75612	Reverse transcript
c1130	18	0.7	20	1	AAQ75590	Reverse transcript	c1203	17.8	0.6	21	1	AAQ75641	Reverse transcript
c1131	18	0.7	20	1	AAQ75582	Reverse transcript	c1204	17.8	0.6	21	1	AAQ75642	Reverse transcript
c1132	18	0.7	20	1	AAQ75580	Reverse transcript	c1205	17.8	0.6	21	1	AAQ75608	Reverse transcript
c1133	18	0.7	20	1	AAQ75587	Reverse transcript	c1206	17.8	0.6	21	1	AAQ75659	Reverse transcript
c1134	18	0.7	20	1	ABZ88694	Human oligonucleot	c1207	17.8	0.6	21	1	AAQ75740	Reverse transcript
c1135	18	0.7	20	1	ADH67348	Human glucocortico	c1208	17.8	0.6	21	1	AAQ75769	Reverse transcript
c1136	18	0.7	20	1	ADH67401	Human glucocortico	c1209	17.8	0.6	21	1	AAQ75779	Reverse transcript
c1137	18	0.7	20	1	ADK74688	Chimeric phosphoro	c1210	17.8	0.6	21	1	AAQ75760	Reverse transcript
c1138	18	0.7	20	1	ADK74367	Chimeric phosphoro	c1211	17.8	0.6	21	1	AAQ75632	Reverse transcript
c1139	18	0.7	20	1	ABD13298	Oligonucleotide OD	c1212	17.8	0.6	21	1	AAQ75637	Reverse transcript
c1140	18	0.7	21	1	AAQ75702	Reverse transcript	c1213	17.8	0.6	21	1	AAQ75737	Reverse transcript
c1141	18	0.7	21	1	AAQ75724	Reverse transcript	c1214	17.8	0.6	21	1	AAQ75757	Reverse transcript
c1142	18	0.7	21	1	AAQ75671	Reverse transcript	c1215	17.8	0.6	21	1	AAQ75785	Reverse transcript
c1143	18	0.7	21	1	AAQ75733	Reverse transcript	c1216	17.8	0.6	21	1	AAQ75637	Reverse transcript
c1144	18	0.7	21	1	AAQ75674	Reverse transcript	c1217	17.8	0.6	21	1	AAQ75768	Reverse transcript
c1145	18	0.7	21	1	AAQ75687	Reverse transcript	c1218	17.8	0.6	21	1	AAQ75640	Reverse transcript
c1146	18	0.7	21	1	AAQ75693	Reverse transcript	c1219	17.8	0.6	21	1	AAQ75662	Reverse transcript
c1147	18	0.7	21	1	AAQ75693	Reverse transcript	c1220	17.8	0.6	21	1	AAQ75755	Reverse transcript
c1148	18	0.7	21	1	AAQ75725	Reverse transcript	c1221	17.8	0.6	21	1	AAQ75653	Reverse transcript
c1149	18	0.7	21	1	AAQ75732	Reverse transcript	c1222	17.8	0.6	21	1	AAQ75761	Reverse transcript
c1150	18	0.7	21	1	AAQ75684	Reverse transcript	c1223	17.8	0.6	21	1	AAQ75765	Reverse transcript
c1151	18	0.7	21	1	AAQ75690	Reverse transcript	c1224	17.8	0.6	21	1	AAQ75654	Reverse transcript
c1152	18	0.7	21	1	AAQ75688	Reverse transcript	c1225	17.8	0.6	21	1	AAQ75792	Reverse transcript
c1153	18	0.7	21	1	AAQ75694	Reverse transcript	c1226	17.8	0.6	21	1	AAZ26563	Human polymorphic
c1154	18	0.7	21	1	AAQ75700	Reverse transcript	c1227	17.8	0.6	21	1	AAZ26563	Human polymorphic
c1155	18	0.7	21	1	AAQ75686	Reverse transcript	c1228	17.6	0.6	19	1	AAQ75549	Telomerase Oligo-d
c1156	18	0.7	21	1	AAQ75689	Reverse transcript	c1229	17.4	0.6	19	1	AAQ75548	Reverse transcript
c1157	18	0.7	21	1	AAQ75723	Reverse transcript	c1230	17.4	0.6	19	1	AAQ75556	Reverse transcript
c1158	18	0.7	21	1	AAQ75726	Reverse transcript	c1231	17.4	0.6	19	1	AAQ75547	Reverse transcript
c1159	18	0.7	21	1	AAQ75692	Reverse transcript	c1232	17.4	0.6	19	1	AAQ75555	Reverse transcript
c1160	18	0.7	21	1	AAQ75685	Reverse transcript	c1233	17.4	0.6	19	1	AAQ75557	Reverse transcript
c1161	18	0.7	21	1	AAQ75699	Reverse transcript	c1234	17.4	0.6	19	1	ABK94423	Human MLH1 DNA mis
c1162	18	0.7	21	1	AAQ75731	Reverse transcript	c1235	17.4	0.6	20	1	AAQ75566	Reverse transcript
c1163	18	0.7	21	1	AAQ75673	Reverse transcript	c1236	17.4	0.6	20	1	AAQ75591	Reverse transcript
c1164	18	0.7	21	1	AAQ75691	Reverse transcript	c1237	17.4	0.6	20	1	AAQ75598	Reverse transcript
c1165	18	0.7	21	1	AAQ75734	Reverse transcript	c1238	17.4	0.6	20	1	AAQ75599	Reverse transcript
c1166	18	0.7	21	1	AAQ75683	Reverse transcript	c1239	17.4	0.6	20	1	AAQ75570	Reverse transcript
c1167	18	0.7	21	1	AAQ75701	Reverse transcript	c1240	17.4	0.6	20	1	AAQ75596	Reverse transcript
c1168	18	0.7	21	1	ADK01323	Rat DNA microarray	c1241	17.4	0.6	20	1	AAQ75560	Reverse transcript
c1169	18	0.7	21	1	ADK01307	Rat DNA microarray	c1242	17.4	0.6	20	1	AAQ75597	Reverse transcript
c1170	18	0.7	21	1	ADK01306	Rat DNA microarray	c1243	17.4	0.6	20	1	AAQ75594	Reverse transcript
c1171	18	0.7	21	1	ADK01305	Rat DNA microarray	c1244	17.4	0.6	20	1	AAQ75564	Reverse transcript
c1172	18	0.7	21	1	ADK01308	Rat DNA microarray	c1245	17.4	0.6	20	1	AAQ75565	Reverse transcript
c1173	18	0.7	21	1	ADK01321	Rat DNA microarray	c1246	17.4	0.6	20	1	AAQ75562	Reverse transcript
c1174	18	0.7	21	1	ADK01322	Rat DNA microarray	c1247	17.4	0.6	20	1	AAQ75602	Reverse transcript
c1175	18	0.7	21	1	ADK01324	Rat DNA microarray	c1248	17.4	0.6	20	1	AAQ75567	Reverse transcript
c1176	18	0.7	21	1	ABD25933	AA505075-derived o	c1249	17.4	0.6	20	1	AAQ75592	Reverse transcript
c1177	18	0.7	21	1	ADP86142	Cpg immunostimulat	c1250	17.4	0.6	20	1	AAQ75599	Reverse transcript
c1178	18	0.7	21	1	ADK69527	Mouse ICAM-1 bindi	c1251	17.4	0.6	20	1	AAF99943	Synthetic oligonuc
c1179	18	0.7	22	1	AAQ64706	2',5'-linked tetra	c1252	17.4	0.6	20	1	ABK48094	Human dendritic ce
c1180	17.8	0.6	21	1	AAQ75611	Reverse transcript	c1253	17.4	0.6	20	1	ABK48093	Human dendritic ce
c1181	17.8	0.6	21	1	AAQ75630	Reverse transcript	c1254	17.4	0.6	20	1	ABZ85534	Human oligonucleot
c1182	17.8	0.6	21	1	AAQ75633	Reverse transcript	c1255	17.4	0.6	20	1	ABZ89487	Human oligonucleot
c1183	17.8	0.6	21	1	AAQ75651	Reverse transcript	c1256	17.4	0.6	20	1	ABZ89487	Human oligonucleot
c1184	17.8	0.6	21	1	AAQ75748	Reverse transcript	c1257	17.4	0.6	20	1	ABZ88938	Human oligonucleot
c1185	17.8	0.6	21	1	AAQ75609	Reverse transcript	c1258	17.4	0.6	20	1	ABZ89872	Human oligonucleot
c1186	17.8	0.6	21	1	AAQ75620	Reverse transcript	c1259	17.4	0.6	20	1	ABD26102	Human oligonucleot
c1187	17.8	0.6	21	1	AAQ75657	Reverse transcript	c1260	17.4	0.6	20	1	ABD26102	Human oligonucleot
c1188	17.8	0.6	21	1	AAQ75664	Reverse transcript	c1261	17.4	0.6	20	1	ABD21764	Human scannocalci
c1189	17.8	0.6	21	1	AAQ75736	Reverse transcript	c1262	17.4	0.6	20	1	ABD25178	AI034360-derived o
c1190	17.8	0.6	21	1	AAQ75627	Reverse transcript	c1263	17.4	0.6	20	1	ABD25168	AI041482-derived o
c1191	17.8	0.6	21	1	AAQ75739	Reverse transcript	c1264	17.4	0.6	20	1	ADH66659	AA679352-derived o
c1192	17.8	0.6	21	1	AAQ75787	Reverse transcript	c1265	17.4	0.6	20	1	ADH66659	Human glucocortico
c1193	17.8	0.6	21	1	AAQ75629	Reverse transcript	c1266	17.4	0.6	20	1	ADK74413	Chimeric phosphoro
c1194	17.8	0.6	21	1	AAQ75639	Reverse transcript	c1267	17.4	0.6	20	1	ADM14371	Human mpegES-1 chim
c1195	17.8	0.6	21	1	AAQ75780	Reverse transcript	c1268	17.4	0.6	21	1	AAQ75622	Reverse transcript
c1196	17.8	0.6	21	1	AAQ75781	Reverse transcript	c1269	17.4	0.6	21	1	AAQ75735	Reverse transcript
c1197	17.8	0.6	21	1	AAQ75793	Reverse transcript	c1270	17.4	0.6	21	1	AAQ75738	Reverse transcript
c1198	17.8	0.6	21	1	AAQ75614	Reverse transcript	c1271	17.4	0.6	21	1	AAQ75762	Reverse transcript
c1199	17.8	0.6	21	1	AAQ75652	Reverse transcript	c1272	17.4	0.6	21	1	AAQ75631	Reverse transcript
c1200	17.8	0.6	21	1	AAQ75665	Reverse transcript	c1273	17.4	0.6	21	1	AAQ75607	Reverse transcript
c1201	17.8	0.6	21	1	AAQ75767	Reverse transcript	c1274	17.4	0.6	21	1	AAQ75634	Reverse transcript

c1275	17.4	0.6	21	1	AAQ75741	Reverse transcript	1348	17	0.6	20	1	ABD25244	AI051839-derived o
c1276	17.4	0.6	21	1	AAQ75763	Reverse transcript	1349	17	0.6	20	1	ABD26126	AA463249-derived o
c1277	17.4	0.6	21	1	AAQ75742	Reverse transcript	c1350	17	0.6	20	1	ADH67409	Human glucocorticoid
c1278	17.4	0.6	21	1	AAQ75747	Reverse transcript	c1351	17	0.6	20	1	ADK75123	Chimeric phosphoro
c1279	17.4	0.6	21	1	AAQ75758	Reverse transcript	c1352	17	0.6	20	1	ADK74838	Chimeric phosphoro
c1280	17.4	0.6	21	1	AAQ75764	Reverse transcript	c1353	17	0.6	21	1	AAQ75670	Reverse transcript
c1281	17.4	0.6	21	1	AAQ75628	Reverse transcript	c1354	17	0.6	21	1	AAQ75795	Reverse transcript
c1282	17.4	0.6	21	1	AAQ75636	Reverse transcript	c1355	17	0.6	21	1	AAQ75661	Reverse transcript
c1283	17.4	0.6	21	1	AAQ75610	Reverse transcript	c1356	17	0.6	21	1	AAQ75669	Reverse transcript
c1284	17.4	0.6	21	1	AAQ75756	Reverse transcript	c1357	17	0.6	21	1	AAQ75798	Reverse transcript
c1285	17.4	0.6	21	1	AAQ75619	Reverse transcript	c1358	17	0.6	21	1	AAQ75668	Reverse transcript
c1286	17.4	0.6	21	1	AAQ75621	Reverse transcript	c1359	17	0.6	21	1	AAQ75794	Reverse transcript
c1287	17.4	0.6	21	1	AAQ75635	Reverse transcript	c1360	17	0.6	21	1	AAQ75660	Reverse transcript
c1288	17.4	0.6	21	1	AAQ75759	Reverse transcript	c1361	17	0.6	21	1	AAQ75667	Reverse transcript
c1289	17.4	0.6	21	1	AAQ75782	Reverse transcript	c1362	17	0.6	21	1	AAQ75786	Reverse transcript
c1290	17.4	0.6	21	1	AAQ75750	Reverse transcript	c1363	17	0.6	21	1	AAQ75788	Reverse transcript
c1291	17.4	0.6	21	1	AAQ75613	Reverse transcript	c1364	17	0.6	21	1	AAQ75791	Reverse transcript
c1292	17.4	0.6	21	1	AAQ75638	Reverse transcript	c1365	17	0.6	21	1	AAQ75655	Reverse transcript
c1293	17.4	0.6	21	1	AAQ75749	Reverse transcript	c1366	17	0.6	21	1	AAQ75663	Reverse transcript
c1294	17.4	0.6	21	1	AAQ75770	Reverse transcript	c1367	17	0.6	21	1	AAQ75796	Reverse transcript
c1295	17.4	0.6	21	1	AAQ75766	Reverse transcript	c1368	17	0.6	21	1	AAQ75797	Reverse transcript
c1296	17.4	0.6	21	1	AAV17253	Reverse transcript	c1369	17	0.6	21	1	AAQ75790	Reverse transcript
c1297	17.2	0.6	18	1	ADP04929	PCR primer 1 used	c1370	17	0.6	21	1	AAQ75656	Reverse transcript
c1298	17.2	0.6	19	1	AAQ94431	Template mRNA poly	c1371	17	0.6	21	1	AAQ75784	Reverse transcript
c1299	17.2	0.6	19	1	AAK18390	RT-PCR primer of t	c1372	17	0.6	21	1	AAQ75666	Reverse transcript
c1300	17	0.6	17	1	AAA25450	Oestrogen receptor	c1373	17	0.6	21	1	AAQ75658	Reverse transcript
c1301	17	0.6	17	1	AAA98232	Human retrovirus H	c1374	17	0.6	21	1	AAQ75789	Reverse transcript
c1302	17	0.6	17	1	AAA50197	2'-Methoxyethoxy-m	c1375	17	0.6	21	1	AAQ75783	Reverse transcript
c1303	17	0.6	17	1	ABT34715	Tumour suppression	c1376	17	0.6	21	1	ADH45661	MAFK9 marker ampl
c1304	17	0.6	17	1	AAQ56441	Antisense oligo #2	c1377	16.8	0.6	20	1	AAT38295	Specific primer fo
c1305	17	0.6	17	1	AAQ56448	2'-F-ANA antisense	c1378	16.8	0.6	20	1	AAS05713	Poly(pyrimidine C-r
c1306	17	0.6	17	1	AAQ56449	2'-F-ANA antisense	c1379	16.8	0.6	20	1	AAZ04740	PCR primer used to
c1307	17	0.6	17	1	AAQ56447	2'-F-ANA antisense	c1380	16.8	0.6	20	1	BAF83959	BAF28 gene fragmen
c1308	17	0.6	17	1	AAQ56450	2'-F-ANA antisense	c1381	16.8	0.6	20	1	ABT07486	Rat protein phosph
c1309	17	0.6	17	1	ADB40209	Tumour suppression	c1382	16.8	0.6	20	1	ABZ85669	Human oligonucleot
c1310	17	0.6	17	1	ACC52437	Human tumour suppr	c1383	16.8	0.6	20	1	ABZ85178	Human oligonucleot
c1311	17	0.6	17	1	ADL48642	Human IKK-gamma su	c1384	16.8	0.6	20	1	ABZ85535	Human stanniocalci
c1312	17	0.6	17	1	ADL34488	Nucleotide sequenc	c1385	16.8	0.6	20	1	ABD25408	Human stanniocalci
c1313	17	0.6	17	1	ADQ04016	Annealing primer u	c1386	16.8	0.6	20	1	ABD21899	Human stanniocalci
c1314	17	0.6	17	1	ADP86178	CpG immunostimulat	c1387	16.8	0.6	20	1	ADH70655	Human VEGF co-regu
c1315	17	0.6	17	1	ADP86137	CpG immunostimulat	c1388	16.8	0.6	20	1	ADL01298	Human mPGES-1 chim
c1316	17	0.6	17	1	AECD8137	Poly dT primer SEQ	c1389	16.8	0.6	20	1	ADM14429	Cow prion protein
c1317	17	0.6	17	1	AECD81285	IL-10 expression a	c1390	16.8	0.6	20	1	ADQ081058	TRPM4 target oligo
c1318	17	0.6	17	1	AEF82502	Common marmoset 18	c1391	16.8	0.6	21	1	ACL53467	Human STAT3-specif
c1319	17	0.6	18	1	AAQ94668	Anchored poly(T) o	c1392	16.8	0.6	21	1	ADZ11210	Human STAT3-specif
c1320	17	0.6	18	1	AAQ94669	Anchored poly(T) o	c1393	16.8	0.6	18	1	AAQ30446	Binary encoded seq
c1321	17	0.6	18	1	AAV54170	Nucleotide sequenc	c1394	16.8	0.6	18	1	AAF75598	5'-PCR primer used
c1322	17	0.6	18	1	AAV37712	Human protein AQ2	c1395	16.4	0.6	18	1	ABK13935	Nucleotide sequenc
c1323	17	0.6	18	1	AAV07750	Phosphorothioate o	c1396	16.4	0.6	18	1	ACF13639	Nucleotide sequenc
c1324	17	0.6	18	1	AAK18373	RT-PCR primer of t	c1397	16.4	0.6	18	1	ACF36364	Nucleotide sequenc
c1325	17	0.6	18	1	AAK18372	RT-PCR primer of t	c1398	16.4	0.6	18	1	ACF36364	Nucleotide sequenc
c1326	17	0.6	18	1	AAA40563	Human adult ovary	c1399	16.4	0.6	19	1	ADZ29541	Mitogen activated
c1327	17	0.6	18	1	AAZ90640	mRNA fragment used	c1400	16.4	0.6	19	1	ADZ29704	Mitogen activated
c1328	17	0.6	18	1	AAZ20091	Human adipose tiss	c1401	16.4	0.6	19	1	ADU64845	Human MAP kinase 1
c1329	17	0.6	18	1	ADX69542	Monocytledon tran	c1402	16.4	0.6	19	1	ADU64845	Human MAP kinase 1
c1330	17	0.6	19	1	AAQ75558	Reverse transcript	c1403	16.4	0.6	19	1	ADZ00541	Human AdipoR1 reve
c1331	17	0.6	19	1	AAQ75550	Reverse transcript	c1404	16.4	0.6	19	1	AEA99304	Human FasL TNFSF6
c1332	17	0.6	19	1	ABD24924	AI095492-derived o	c1405	16.4	0.6	19	1	AEA99408	Human FasL TNFSF6
c1333	17	0.6	20	1	AAQ75574	Reverse transcript	c1406	16.4	0.6	19	1	AE90871	STAT-3 siRNA antis
c1334	17	0.6	20	1	AAQ75605	Reverse transcript	c1407	16.4	0.6	19	1	AE90594	STAT-3 siRNA targe
c1335	17	0.6	20	1	AAQ75572	Reverse transcript	c1408	16.4	0.6	19	1	AE65553	Human vitamin D re
c1336	17	0.6	20	1	AAQ75604	Reverse transcript	c1409	16.4	0.6	19	1	AE655297	Human vitamin D re
c1337	17	0.6	20	1	AAQ75573	Reverse transcript	c1410	16.4	0.6	19	1	AEF36928	Human SDF-1 (CXCL1
c1338	17	0.6	20	1	AAQ75606	Reverse transcript	c1411	16.4	0.6	19	1	AEF37107	Human SDF-1 (CXCL1
c1339	17	0.6	20	1	AAQ75603	Reverse transcript	c1412	16.4	0.6	20	1	AAV12302	Ribonucleotide red
c1340	17	0.6	20	1	AAQ75571	Reverse transcript	c1413	16.4	0.6	20	1	AAQ68768	Human FUT6 antisen
c1341	17	0.6	20	1	ABQ79871	Nucleotide sequenc	c1414	16.4	0.6	20	1	AAQ91207	Antisense IGFBP-5
c1342	17	0.6	20	1	ABA05917	Hepatitis B virus	c1415	16.4	0.6	20	1	AAQ91207	Antisense IGFBP-5
c1343	17	0.6	20	1	ABZ89896	Human oligonucleot	c1416	16.4	0.6	20	1	ADP87936	Single nucleotide
c1344	17	0.6	20	1	ABZ89703	Human oligonucleot	c1417	16.4	0.6	20	1	ADZ85532	Human oligonucleot
c1345	17	0.6	20	1	ABZ89719	Human oligonucleot	c1418	16.4	0.6	20	1	ABD21762	Human stanniocalci
c1346	17	0.6	20	1	ABZ89014	Human oligonucleot	c1419	16.4	0.6	20	1	ADH66380	Human glucocorticoid
c1347	17	0.6	20	1	ABD25949	AA906703-derived o	c1420	16.4	0.6	20	1	ADU61530	Oligonucleotide as

c1421	16.4	0.6	20	1	ADK73725	Chimeric phosphoro	c1494	16	0.6	18	1	ADL95318	Anti-proliferative
c1422	16.4	0.6	20	1	ADK46920	Human oligonucleot	1495	16	0.6	18	1	AEC52473	Antisense oligonuc
c1423	16.4	0.6	20	1	ADP69379	Human mitonEET-spe	1496	16	0.6	18	1	AEC52193	Antisense oligonuc
c1424	16.2	0.6	18	1	AAK18389	RT-PCR primer of t	1497	16	0.6	18	1	AEC52333	Antisense oligonuc
c1425	16	0.6	16	1	AAK18368	RT-PCR primer of t	1498	16	0.6	19	1	ADK70862	5' mRNA DNA prepar
c1426	16	0.6	16	1	AAK07568	Homo sapiens fetal	1499	16	0.6	19	1	ADR81681	Hepatitis C virus
c1427	16	0.6	16	1	AAK66068	DNA chip primer #4	1500	16	0.6	19	1	ADT86138	Hepatitis C virus
c1428	16	0.6	16	1	AAK66068	Homo sapiens fetal	1501	16	0.6	19	1	AEA99200	Human Fas and FasL
c1429	16	0.6	16	1	ABA04585	Oligonucleotide #5	1502	16	0.6	19	1	AEA99050	Human Fas and FasL
c1430	16	0.6	16	1	AAF30895	Oligonucleotide-mi	1503	16	0.6	19	1	AEA32216	Human ICAM1 siRNA
c1431	16	0.6	16	1	AAF30880	Oligonucleotide po	1504	16	0.6	19	1	AEA32050	Human ICAM1 siRNA
c1432	16	0.6	16	1	AAH42481	Oligonucleotide us	1505	16	0.6	20	1	ADK34499	7T11Apad P527-20-
c1433	16	0.6	16	1	ABA97402	Nucleotide sequenc	1506	16	0.6	20	1	ACA90051	Cardiovascular dis
c1434	16	0.6	16	1	AAK56451	2F-ANA antisense	1507	16	0.6	20	1	ABZ91658	Human oligonucleot
c1435	16	0.6	16	1	AAK56451	2F-ANA antisense	1508	16	0.6	20	1	ABZ91658	Human oligonucleot
c1436	16	0.6	16	1	ADB68519	Oligo-homodeoxyrib	1509	16	0.6	20	1	ADH67050	Human glucocortic
c1437	16	0.6	16	1	ADZ20614	DNA hybridisation	1510	16	0.6	20	1	ADK76466	Chimeric phosphoro
c1438	16	0.6	16	1	ADJ34487	Nucleotide sequenc	1511	16	0.6	20	1	ADK76466	Chimeric phosphoro
c1439	16	0.6	16	1	ABE77257	Oligo, SEQ ID NO:	1512	16	0.6	20	1	ADK75214	Chimeric phosphoro
c1440	16	0.6	16	1	AEC34066	Zea mays ZmKSPF1	1513	16	0.6	20	1	ADK75214	Chimeric phosphoro
c1441	16	0.6	16	1	AED63168	Family 16/15(inv(a	1514	15.8	0.6	20	1	AEF79008	Human dopamine rec
c1442	16	0.6	16	1	AED63150	Family 16/15(inv(a	1515	15.8	0.6	19	1	ABZ9441	Human IL-10 PCR pr
c1443	16	0.6	17	1	AAK69800	Human fit1 VEGF re	1516	15.8	0.6	19	1	ADH01585	Protein tyrosine p
c1444	16	0.6	17	1	AAK69801	Human fit1 VEGF re	1517	15.8	0.6	19	1	ADH01585	Protein tyrosine p
c1445	16	0.6	17	1	AAV49503	Human eosinophil c	1518	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1446	16	0.6	17	1	AAK18371	RT-PCR primer of t	1519	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1447	16	0.6	17	1	AAK18370	RT-PCR primer of t	1520	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1448	16	0.6	17	1	AAA30179	PCR primer GT15A u	1521	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1449	16	0.6	17	1	AAK82720	Human Iga nephropa	1522	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1450	16	0.6	17	1	AAZ36739	Anchored oligo(dT)	1523	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1451	16	0.6	17	1	AAK25449	Oestrogen receptor	1524	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1452	16	0.6	17	1	AAK25451	Oestrogen receptor	1525	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1453	16	0.6	17	1	AAK64202	PCR anchor primer,	1526	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1454	16	0.6	17	1	AAK64181	PCR anchor primer,	1527	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1455	16	0.6	17	1	AAK64171	PCR anchor primer,	1528	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1456	16	0.6	17	1	AAK64161	PCR anchor primer,	1529	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1457	16	0.6	17	1	AAK64213	PCR anchor primer,	1530	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1458	16	0.6	17	1	AAK64230	PCR anchor primer,	1531	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1459	16	0.6	17	1	AAK91719	Human pollinosis-a	1532	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1460	16	0.6	17	1	AAK82874	Human pollinosis-a	1533	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1461	16	0.6	17	1	AAH47126	Nucleotide sequenc	1534	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1462	16	0.6	17	1	ABK13941	5'-PCR primer used	1535	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1463	16	0.6	17	1	ABK13941	5'-PCR primer used	1536	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1464	16	0.6	17	1	ABL99038	Human Acetyltransf	1537	15.8	0.6	19	1	ADL79082	Human HBR2 (EGFR2)
c1465	16	0.6	17	1	ABN99829	Nucleotide sequenc	1538	15.6	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1466	16	0.6	17	1	AAK49948	Human allergic dis	1539	15.6	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1467	16	0.6	17	1	AAK47234	Human B153 expres	1540	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1468	16	0.6	17	1	ABK49756	Allergic disease e	1541	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1469	16	0.6	17	1	ADB04271	Human atopie derma	1542	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1470	16	0.6	17	1	ADB04272	Human MD27 scannin	1543	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1471	16	0.6	17	1	ACC65266	Murine oligonucleo	1544	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1472	16	0.6	17	1	ABZ70578	Primer, Synthetic	1545	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1473	16	0.6	17	1	ACF36345	Nucleotide sequenc	1546	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1474	16	0.6	17	1	ACF36370	Nucleotide sequenc	1547	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1475	16	0.6	17	1	ADC84468	PCR primer for amp	1548	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1476	16	0.6	17	1	ADF47483	Gene prediction ta	1549	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1477	16	0.6	17	1	ADF62257	Human PCCP1 DNA fr	1550	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1478	16	0.6	17	1	ADF62258	Human PCCP1 DNA fr	1551	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1479	16	0.6	17	1	ADL48488	Human IKK-gamma su	1552	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1480	16	0.6	17	1	ADL48488	Human IKK-gamma su	1553	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1481	16	0.6	17	1	ADL13009	PCR primer GT15A u	1554	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1482	16	0.6	17	1	AED81275	IL-10 expression a	1555	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1483	16	0.6	17	1	AED81275	IL-10 expression a	1556	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1484	16	0.6	18	1	AAK30173	L1 region of the b	1557	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1485	16	0.6	18	1	AAV54173	Nucleotide sequenc	1558	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1486	16	0.6	18	1	AAV54164	Nucleotide sequenc	1559	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1487	16	0.6	18	1	AAV54167	Nucleotide sequenc	1560	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1488	16	0.6	18	1	AAZ90649	Human adipose tiss	1561	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1489	16	0.6	18	1	AAZ90646	Human adipose tiss	1562	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1490	16	0.6	18	1	AAZ90643	Human adipose tiss	1563	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1491	16	0.6	18	1	AAZ90643	Human adipose tiss	1564	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1492	16	0.6	18	1	AAZ90643	Human adipose tiss	1565	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1493	16	0.6	18	1	AAZ90643	Human adipose tiss	1566	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1494	16	0.6	18	1	AAZ90643	Human adipose tiss	1567	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1495	16	0.6	18	1	AAZ90643	Human adipose tiss	1568	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1496	16	0.6	18	1	AAZ90643	Human adipose tiss	1569	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1497	16	0.6	18	1	AAZ90643	Human adipose tiss	1570	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1498	16	0.6	18	1	AAZ90643	Human adipose tiss	1571	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1499	16	0.6	18	1	AAZ90643	Human adipose tiss	1572	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1500	16	0.6	18	1	AAZ90643	Human adipose tiss	1573	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1501	16	0.6	18	1	AAZ90643	Human adipose tiss	1574	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1502	16	0.6	18	1	AAZ90643	Human adipose tiss	1575	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1503	16	0.6	18	1	AAZ90643	Human adipose tiss	1576	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1504	16	0.6	18	1	AAZ90643	Human adipose tiss	1577	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1505	16	0.6	18	1	AAZ90643	Human adipose tiss	1578	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1506	16	0.6	18	1	AAZ90643	Human adipose tiss	1579	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1507	16	0.6	18	1	AAZ90643	Human adipose tiss	1580	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1508	16	0.6	18	1	AAZ90643	Human adipose tiss	1581	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1509	16	0.6	18	1	AAZ90643	Human adipose tiss	1582	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1510	16	0.6	18	1	AAZ90643	Human adipose tiss	1583	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1511	16	0.6	18	1	AAZ90643	Human adipose tiss	1584	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1512	16	0.6	18	1	AAZ90643	Human adipose tiss	1585	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1513	16	0.6	18	1	AAZ90643	Human adipose tiss	1586	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1514	16	0.6	18	1	AAZ90643	Human adipose tiss	1587	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1515	16	0.6	18	1	AAZ90643	Human adipose tiss	1588	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1516	16	0.6	18	1	AAZ90643	Human adipose tiss	1589	15.4	0.6	17	1	ADL79082	Human HBR2 (EGFR2)
c1517	16	0.6	18	1	AAZ90643	Human adipose tiss	1590	15.4	0.6	17	1		

c1567 15.4 0.6 18 1 AAQ30448 Oligomer TNFR943 f
c1568 15.4 0.6 18 1 AAQ30447 Oligomer TNFR942 f
c1569 15.4 0.6 18 1 AAQ30447 Nucleotide sequenc
c1570 15.4 0.6 18 1 AAV54168 Nucleotide sequenc
c1571 15.4 0.6 18 1 AAV54166 Nucleotide sequenc
c1572 15.4 0.6 18 1 AAV54169 Nucleotide sequenc
c1573 15.4 0.6 18 1 AAV54172 Nucleotide sequenc
c1574 15.4 0.6 18 1 AAV54171 Human adipose tiss
c1575 15.4 0.6 18 1 AAZ90648 Human adipose tiss
c1576 15.4 0.6 18 1 AAZ90644 Human adipose tiss
c1577 15.4 0.6 18 1 AAZ90642 Human adipose tiss
c1578 15.4 0.6 18 1 AAZ90641 Human adipose tiss
c1579 15.4 0.6 18 1 AAZ90645 Human adipose tiss
c1580 15.4 0.6 18 1 AAZ90647 Human adipose tiss
c1581 15.4 0.6 18 1 AAZ70554 Human biallelic ma
c1582 15.4 0.6 18 1 AAZ37914 SNP specific lower
c1583 15.4 0.6 18 1 AB081304 Cytochrome P450 C
c1584 15.4 0.6 18 1 AEC52846 Antisense oligonuc
c1585 15.4 0.6 18 1 AEC52706 Antisense oligonuc
c1586 15.4 0.6 18 1 AEF69372 P. pratense Phi p
c1587 15.4 0.6 18 1 AEF93735 Human chromosome 1
c1588 15.4 0.6 18 1 AEF93897 Human chromosome 1
c1589 15.4 0.6 19 1 AAH40922 SNP specific lower
c1590 15.4 0.6 19 1 ADC49403 Cytochrome P450 ge
c1591 15.4 0.6 19 1 ADF47937 Human Myc transcri
c1592 15.4 0.6 19 1 ADF48055 Human Myc siRNA low
c1593 15.4 0.6 19 1 ADL25335 Intestinal epithel
c1594 15.4 0.6 19 1 ADL16519 4 synthesis-period
c1595 15.4 0.6 19 1 ADT64925 SARS coronavirus s
c1596 15.4 0.6 19 1 ADT63274 SARS coronavirus s
c1597 15.2 0.6 16 1 AAP82119 Human TSA7005 gene
c1598 15.2 0.6 17 1 AAX18388 RT-PCR primer of t
c1599 15.2 0.6 17 1 AAS14174 Modified Poly-T Pr
c1600 15.2 0.6 19 1 ADM11779 Environmental poll

ALIGNMENTS

RESULT 1
ABN59221 ID ABN59221 standard; DNA; 60 BP.
XX AC ABN59221;
XX 15-JUL-2002 (first entry)
DE Human spliced transcript detection oligonucleotide SEQ ID NO:31969.
XX Human; mouse; rat; splice transcript; detection; RNA transcript;
KW splice variant; transcriptome; oligonucleotide library; ss.
XX Homo sapiens.
XX WO200210449-A2.
XX 07-FEB-2002.
XX 20-JUL-2001; 2001WO-IB001903.
XX 28-JUL-2000; 2000US-0221607P.
PR 02-MAY-2001; 2001US-0287724P.
XX (COMP-) COMPUGEN INC.
XX Shoshan A, Wasserman A, Mintz E, Mintz L, Faigler S;
XX WPI; 2002-257383/30.
XX New oligonucleotide libraries comprising oligonucleotides which
PT selectively hybridize to mRNAs transcribed from a transcription unit of a
PT genome, useful for detecting tissue-, pathology-, and developmental-
PT specific genes.

XX Example 1; SEQ ID NO 31969; 47pp; English.
XX The present invention describes oligonucleotide libraries for detecting
XX messenger RNAs that populate a (sub-)transcriptome, where the (sub-
XX)transcriptome comprises messenger RNAs transcribed from multiple
XX transcription units that populate a genome. The library comprises several
XX oligonucleotides, each capable of hybridising selectively to a set of
XX messenger RNAs transcribed from a given transcription unit of the genome,
XX which encodes one or more messenger RNA splice variants. The
XX oligonucleotide libraries are useful for detecting mRNAs from a
XX biological sample, in expression profiling studies, in qualitatively or
XX quantitatively characterising the corresponding transcriptome, and in
XX detecting RNA transcripts and splice variants of human or animal
XX transcripts. The libraries may also be used as specialised mini
XX libraries to detect transcripts of a sub-transcriptome under a particular
XX biological or pathological state, and so allowing the detection of tissue
XX - and pathology-specific genes such as those genes only expressed in
XX specific tissue under a specific pathological condition; to detect
XX developmental specific genes; and to detect RNA transcripts and splice
XX variants of a transcriptome of a patient suffering from a particular
XX disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from
XX rats, humans and mice, which are used in the exemplification of the
XX present invention. N.B. The sequence data for this patent did not form
XX part of the printed specification, but was obtained in electronic format
XX directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX Sequence 60 BP; 17 A; 16 C; 18 G; 9 T; 0 U; 0 Other;
SQ Query Match 2.2%; Score 60; DB 1; Length 60;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2337 AAGAGGAGCTGAAGACCCACATCAGCAGGAGGTACCTGGGCAAGTTCACGTGCCCATGC 2396
DB 1 AAGAGGAGCTGAAGACCCACATCAGCAGGAGGTACCTGGGCAAGTTCACGTGCCCATGC 60
RESULT 2
ABN59222 ID ABN59222 standard; DNA; 60 BP.
XX AC ABN59222;
XX 15-JUL-2002 (first entry)
DE Human spliced transcript detection oligonucleotide SEQ ID NO:31970.
XX Human; mouse; rat; splice transcript; detection; RNA transcript;
KW splice variant; transcriptome; oligonucleotide library; ss.
XX Homo sapiens.
XX WO200210449-A2.
XX 07-FEB-2002.
XX 20-JUL-2001; 2001WO-IB001903.
XX 28-JUL-2000; 2000US-0221607P.
PR 02-MAY-2001; 2001US-0287724P.
XX (COMP-) COMPUGEN INC.
XX Shoshan A, Wasserman A, Mintz E, Mintz L, Faigler S;
XX WPI; 2002-257383/30.
XX New oligonucleotide libraries comprising oligonucleotides which
PT selectively hybridize to mRNAs transcribed from a transcription unit of a
PT genome, useful for detecting tissue-, pathology-, and developmental-
PT specific genes.

```

PS Example 1; SEQ ID NO 31970; 47pp; English.
XX
CC The present invention describes oligonucleotide libraries for detecting
CC messenger RNAs that populate a (sub-)transcriptome, where the (sub-)
CC )transcriptome comprises messenger RNAs transcribed from multiple
CC transcription units that populate a genome. The library comprises several
CC oligonucleotides, each capable of hybridising selectively to a set of
CC messenger RNAs transcribed from a given transcription unit of the genome,
CC which encodes one or more messenger RNA splice variants. The
CC oligonucleotide libraries are useful for detecting mRNAs from a
CC biological sample, in expression profiling studies, in qualitatively or
CC quantitatively characterising the corresponding transcriptome, and in
CC detecting RNA transcripts and splice variants of human or animal
CC transcriptomes. The libraries may also be used as specialised mini
CC libraries to detect transcripts of a sub-transcriptome under a particular
CC biological or pathological state, and so allowing the detection of tissue
CC - and pathology-specific genes such as those genes only expressed in
CC specific tissue under a specific pathological condition; to detect
CC developmental specific genes; and to detect RNA transcripts and splice
CC variants of a transcriptome of a patient suffering from a particular
CC disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from
CC rats, humans and mice, which are used in the exemplification of the
CC present invention. N.B. The sequence data for this patent did not form
CC part of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 60 BP; 14 A; 12 C; 16 G; 18 T; 0 U; 0 Other;
Query Match 2.2%; Score 60; DB 1; Length 60;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2564 TTCTCTGAGCTAGGAAGTCTACCGCATAGTCGAGGACTTTATGTTTTTGAGGC 2623
DB 1 TTCTCTGAGCTAGGAAGTCTACCGCATAGTCGAGGACTTTATGTTTTTGAGGC 60
RESULT 3
ABN59220
ID ABN59220 standard; DNA; 60 BP.
XX
AC ABN59220;
XX
DT 15-JUL-2002 (first entry)
XX
DE Human spliced transcript detection oligonucleotide SEQ ID NO:31968.
XX
KW Human; mouse; rat; splice transcript; detection; RNA transcript;
KW splice variant; transcriptome; oligonucleotide library; ss.
XX
OS Homo sapiens.
XX
PN WO200210449-A2.
XX
PD 07-FEB-2002.
XX
PF 20-JUL-2001; 2001WO-IB001903.
XX
PR 28-JUL-2000; 2000US-0221607P.
PR 02-MAY-2001; 2001US-0287724P.
XX
PA (COMP-) COMPUGEN INC.
XX
PI Shoshan A, Wasserman A, Mintz E, Mintz L, Faigler S;
XX
DR WPI; 2002-257383/30.
XX
PT New oligonucleotide libraries comprising oligonucleotides which
PT selectively hybridize to mRNAs transcribed from a transcription unit of a
PT genome, useful for detecting tissue-, pathology-, and developmental-
PT specific genes.
XX
PS Example 1; SEQ ID NO 31968; 47pp; English.

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XX
CC The present invention describes oligonucleotide libraries for detecting
CC messenger RNAs that populate a (sub-)transcriptome, where the (sub-)
CC )transcriptome comprises messenger RNAs transcribed from multiple
CC transcription units that populate a genome. The library comprises several
CC oligonucleotides, each capable of hybridising selectively to a set of
CC messenger RNAs transcribed from a given transcription unit of the genome,
CC which encodes one or more messenger RNA splice variants. The
CC oligonucleotide libraries are useful for detecting mRNAs from a
CC biological sample, in expression profiling studies, in qualitatively or
CC quantitatively characterising the corresponding transcriptome, and in
CC detecting RNA transcripts and splice variants of human or animal
CC transcriptomes. The libraries may also be used as specialised mini
CC libraries to detect transcripts of a sub-transcriptome under a particular
CC biological or pathological state, and so allowing the detection of tissue
CC - and pathology-specific genes such as those genes only expressed in
CC specific tissue under a specific pathological condition; to detect
CC developmental specific genes; and to detect RNA transcripts and splice
CC variants of a transcriptome of a patient suffering from a particular
CC disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from
CC rats, humans and mice, which are used in the exemplification of the
CC present invention. N.B. The sequence data for this patent did not form
CC part of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 60 BP; 22 A; 12 C; 15 G; 11 T; 0 U; 0 Other;
Query Match 2.2%; Score 60; DB 1; Length 60;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 992 GCAAAACGAATTCCTAGAGCTTGACCGAGTAAAGGGCAGCAGGACAAAACGTTTCCAA 1051
DB 1 GCAAAACGAATTCCTAGAGCTTGACCGAGTAAAGGGCAGCAGGACAAAACGTTTCCAA 60
RESULT 4
ABN33255
ID ABN33255 standard; DNA; 60 BP.
XX
AC ABN33255;
XX
DT 15-JUL-2002 (first entry)
XX
DE Human spliced transcript detection oligonucleotide SEQ ID NO:6003.
XX
KW Human; mouse; rat; splice transcript; detection; RNA transcript;
KW splice variant; transcriptome; oligonucleotide library; ss.
XX
OS Homo sapiens.
XX
PN WO200210449-A2.
XX
PD 07-FEB-2002.
XX
PF 20-JUL-2001; 2001WO-IB001903.
XX
PR 28-JUL-2000; 2000US-0221607P.
PR 02-MAY-2001; 2001US-0287724P.
XX
PA (COMP-) COMPUGEN INC.
XX
PI Shoshan A, Wasserman A, Mintz E, Mintz L, Faigler S;
XX
DR WPI; 2002-257383/30.
XX
PT New oligonucleotide libraries comprising oligonucleotides which
PT selectively hybridize to mRNAs transcribed from a transcription unit of a
PT genome, useful for detecting tissue-, pathology-, and developmental-
PT specific genes.
XX
PS Example 1; SEQ ID NO 6003; 47pp; English.

```

CC The present invention describes oligonucleotide libraries for detecting
 CC messenger RNAs that populate a (sub-)transcriptome, where the (sub-
 CC)transcriptome comprises messenger RNAs transcribed from multiple
 CC transcription units that populate a genome. The library comprises several
 CC oligonucleotides, each capable of hybridising selectively to a set of
 CC messenger RNAs transcribed from a given transcription unit of the genome,
 CC which encodes one or more messenger RNA splice variants. The
 CC oligonucleotide libraries are useful for detecting mRNAs from a
 CC biological sample, in expression profiling studies, in qualitatively or
 CC quantitatively characterising the corresponding transcriptome, and in
 CC detecting RNA transcripts and splice variants of human or animal
 CC transcriptomes. The libraries may also be used as specialised mini
 CC libraries to detect transcripts of a sub-transcriptome under a particular
 CC biological or pathological state, and so allowing the detection of tissue
 CC - and pathology-specific genes such as those genes only expressed in
 CC specific tissue under a specific pathological condition; to detect
 CC developmental specific genes; and to detect RNA transcripts and splice
 CC variants of a transcriptome of a patient suffering from a particular
 CC disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from
 CC rats, humans and mice, which are used in the exemplification of the
 CC present invention. N.B. The sequence data for this patent did not form
 CC part of the printed specification, but was obtained in electronic format
 CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
 CC
 CC
 CC Sequence 60 BP; 14 A; 13 C; 20 G; 13 T; 0 U; 0 Other;

Query Match 2.2%; Score 60; DB 1; Length 60;
 Best Local Similarity 100.0%; Pred. No. 2.4;
 Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2119 GAACCTGGAGCCCTTGGCTTGGATTGATGGAGCCGGAACAGCAGTGCACATT 2178
 DB 1 GAACCTGGAGCCCTTGGCTTGGATTGATGGAGCCGGAACAGCAGTGCACATT 60

RESULT 5
 ID ABN59048
 AC ABN59048 standard; DNA; 60 BP.
 AC ABN59048;
 XX
 XX
 DT 15-JUL-2002 (first entry)
 XX
 DE Human spliced transcript detection oligonucleotide SEQ ID NO:31796.
 XX
 KW Human; mouse; rat; splice transcript; detection; RNA transcript;
 KW splice variant; transcriptome; oligonucleotide library; ss.
 XX
 XX Homo sapiens.
 OS
 XX WO200210449-A2.
 PN
 XX
 PD 07-FEB-2002.
 XX
 PF 20-JUL-2001; 2001WO-18001903.
 XX
 PR 28-JUL-2000; 2000US-0221607P.
 PR 02-MAY-2001; 2001US-0287724P.
 XX
 XX (COMP-) COMPUGEN INC.
 PA
 XX Shoshan A, Wasserman A, Mintz E, Mintz L, Faigler S;
 PI
 XX WPI; 2002-257383/30.
 DR
 XX
 XX New oligonucleotide libraries comprising oligonucleotides which
 PT selectively hybridize to mRNAs transcribed from a transcription unit of a
 PT genome, useful for detecting tissue-, pathology-, and developmental-
 PT specific genes.
 XX
 XX Example 1; SEQ ID NO 31796; 47pp; English.
 PS
 XX The present invention describes oligonucleotide libraries for detecting

CC messenger RNAs that populate a (sub-)transcriptome, where the (sub-
 CC)transcriptome comprises messenger RNAs transcribed from multiple
 CC transcription units that populate a genome. The library comprises several
 CC oligonucleotides, each capable of hybridising selectively to a set of
 CC messenger RNAs transcribed from a given transcription unit of the genome,
 CC which encodes one or more messenger RNA splice variants. The
 CC oligonucleotide libraries are useful for detecting mRNAs from a
 CC biological sample, in expression profiling studies, in qualitatively or
 CC quantitatively characterising the corresponding transcriptome, and in
 CC detecting RNA transcripts and splice variants of human or animal
 CC transcriptomes. The libraries may also be used as specialised mini
 CC libraries to detect transcripts of a sub-transcriptome under a particular
 CC biological or pathological state, and so allowing the detection of tissue
 CC - and pathology-specific genes such as those genes only expressed in
 CC specific tissue under a specific pathological condition; to detect
 CC developmental specific genes; and to detect RNA transcripts and splice
 CC variants of a transcriptome of a patient suffering from a particular
 CC disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from
 CC rats, humans and mice, which are used in the exemplification of the
 CC present invention. N.B. The sequence data for this patent did not form
 CC part of the printed specification, but was obtained in electronic format
 CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
 CC
 CC
 CC Sequence 60 BP; 14 A; 12 C; 16 G; 18 T; 0 U; 0 Other;

Query Match 2.2%; Score 60; DB 1; Length 60;
 Best Local Similarity 100.0%; Pred. No. 2.4;
 Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2564 TTCTCCTGAGCTAGGAAGAGTCTACCCGACATTAAGTCGAGGACTTTATGTTTGGAGC 2623
 DB 1 TTCTCCTGAGCTAGGAAGAGTCTACCCGACATTAAGTCGAGGACTTTATGTTTGGAGC 60

RESULT 6
 ADC22315
 ID ADC22315 standard; DNA; 54 BP.
 XX
 AC ADC22315;
 XX
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Nuclear localisation signal nucleotide sequence SEQ ID NO:164.
 XX
 KW recombinant fusion protein; fusion protein; binding; detection;
 KW localisation domain; binding domain;
 KW subcellular compartment localisation; gene; ds.
 XX
 XX Homo sapiens.
 OS
 XX WO2003012068-A2.
 PN
 XX
 PD 13-FEB-2003.
 XX
 PF 01-AUG-2002; 2002WO-US024572.
 XX
 PR 01-AUG-2001; 2001US-0309395P.
 PR 13-DEC-2001; 2001US-0341589P.
 XX
 XX (CELL-) CELLOMICS INC.
 PA
 XX Bright G, Premkumar DR, Chen Y;
 PI
 XX WPI; 2003-248174/24.
 DR
 DR P-PSDB; ADC22314.
 XX
 XX New recombinant fusion protein comprising detection and first
 PT localisation domains and a binding domain for the molecule of interest,
 PT useful for detecting binding of a molecule of interest.
 PT
 XX Claim 20; SEQ ID NO 164; 101pp; English.
 PS
 XX The present invention describes a recombinant fusion protein (I) for

CC detecting binding of a molecule of interest. (I) comprises: (a) a
 CC detection domain; (b) a first localisation domain; and (c) a binding
 CC domain for the molecule of interest. The detection domain, the first
 CC localisation domain and the binding domain for the molecule of interest
 CC constituting the recombinant fusion protein for detecting binding of a
 CC molecule of interest are operably linked. The binding domain for the
 CC molecule of interest is separated from the first localisation domain by 0
 CC -20 amino acid residues. The first localisation domain and the binding
 CC domain for the molecule of interest both do not occur in a single non-
 CC recombinant protein with the same spacing as in the recombinant fusion
 CC protein for detecting binding of a molecule of interest. Also described:
 CC (1) a recombinant nucleic acid encoding the recombinant fusion protein;
 CC (2) a recombinant expression vector comprising the nucleic acid control
 CC sequences operably linked to the recombinant nucleic acid molecule; (3) a
 CC genetically engineered host cell transfected with the recombinant
 CC expression vector; (4) a kit for detecting binding of the molecule of
 CC interest; and (5) a method for identifying compounds that alter the
 CC binding of the molecule of interest. The recombinant fusion protein is
 CC useful for detecting binding of a molecule of interest. The recombinant
 CC fusion protein eliminates the need to construct two or more chimeric
 CC proteins and enables the monitoring of biochemical events in live, intact
 CC or fixed cells. The present sequence is used in the exemplification of
 CC the present invention.

SQ Sequence 54 BP; 25 A; 9 C; 13 G; 7 T; 0 U; 0 Other;

Query Match 2.0%; Score 54; DB 1; Length 54;
 Best Local Similarity 100.0%; Pred. No. 5.9;
 Matches 54; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2270 AAAGTTACCAAGAGAAACACGATATGAGGTTCTCGAAGCAAAAGGCCCAAG 2323
 |||||||
 Db 1 AAAGTTACCAAGAGAAACACGATATGAGGTTCTCGAAGCAAAAGGCCCAAG 54

RESULT 7
 ABZ06784/C
 ID ABZ06784 standard; DNA; 50 BP.
 XX
 AC ABZ06784;
 XX
 DT 09-JAN-2003 (first entry)
 XX
 DE Human leukocyte gene expression profiling probe SEQ ID NO 6775.
 XX
 KW T7; leukocyte; gene expression profiling; allograft rejection;
 KW atherosclerosis; congestive heart failure; systemic lupus erythematosus;
 KW rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
 KW ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200257414-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 22-OCT-2001; 2001WO-US047856.
 XX
 PR 20-OCT-2000; 2000US-0241994P.
 PR 08-JUN-2001; 2001US-0296764P.
 XX
 PA (BIOC-) BIOCARDIA INC.
 XX
 PI Wohlgemuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
 PI Ly N, Woodward R, Quattermous T, Johnson F;
 XX
 DR WPI; 2002-636525/68.
 XX
 PT New system for leukocyte expression profiling, diagnosing a disease, or
 PT monitoring (the rate of) progression of a disease, e.g. atherosclerosis
 PT or congestive heart failure, comprises diagnostic oligonucleotides.
 XX
 PS Claim 1; Page 547; Opp; English.

XX The invention relates to a system for detecting gene expression, which
 CC comprises one or two isolated DNA molecules that detect expression of a
 CC gene, where the gene corresponds to any of 8143 oligonucleotides
 CC (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
 CC for leukocyte expression profiling. It is particularly useful for
 CC diagnosing a disease, monitoring (rate of) progression of a disease,
 CC predicting therapeutic outcome, determining prognosis for a patient,
 CC to treatment in an individual. The diseases include cardiac allograft
 CC rejection, kidney allograft rejection, liver allograft rejection,
 CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
 CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
 XX
 SQ Sequence 50 BP; 10 A; 8 C; 15 G; 17 T; 0 U; 0 Other;
 Query Match 1.8%; Score 50; DB 1; Length 50;
 Best Local Similarity 100.0%; Pred. No. 11;
 Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1493 GCTCTCAAGCCTCTCCATAAAGCTCTATCGGGAACAATGAACCACT 1542
 |||||||
 Db 50 GCTCTCAAGCCTCTCCATAAAGCTCTATCGGGAACAATGAACCACT 1
 RESULT 8
 ABZ06394
 ID ABZ06394 standard; DNA; 50 BP.
 XX
 AC ABZ06394;
 XX
 DT 09-JAN-2003 (first entry)
 XX
 DE Human leukocyte gene expression profiling probe SEQ ID NO 6385.
 XX
 KW T7; leukocyte; gene expression profiling; allograft rejection;
 KW atherosclerosis; congestive heart failure; systemic lupus erythematosus;
 KW rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
 KW ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200257414-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 22-OCT-2001; 2001WO-US047856.
 XX
 PR 20-OCT-2000; 2000US-0241994P.
 PR 08-JUN-2001; 2001US-0296764P.
 XX
 PA (BIOC-) BIOCARDIA INC.
 XX
 PI Wohlgemuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
 PI Ly N, Woodward R, Quattermous T, Johnson F;
 XX
 DR WPI; 2002-636525/68.
 XX
 PT New system for leukocyte expression profiling, diagnosing a disease, or
 PT monitoring (the rate of) progression of a disease, e.g. atherosclerosis
 PT or congestive heart failure, comprises diagnostic oligonucleotides.
 XX
 PS Claim 1; Page 536; Opp; English.
 XX
 CC The invention relates to a system for detecting gene expression, which
 CC comprises one or two isolated DNA molecules that detect expression of a
 CC gene, where the gene corresponds to any of 8143 oligonucleotides
 CC (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
 CC for leukocyte expression profiling. It is particularly useful for
 CC diagnosing a disease, monitoring (rate of) progression of a disease,
 CC predicting therapeutic outcome, determining prognosis for a patient,
 CC to treatment in an individual. The diseases include cardiac allograft

CC rejection, kidney allograft rejection, liver allograft rejection,
CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
XX
SQ Sequence 50 BP; 17 A; 15 C; 8 G; 10 T; 0 U; 0 Other;
Query Match 1.8%; Score 50; DB 1; Length 50;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1493 GCTCTCAAGCCCTCTCCATAAAGCTCTATCGGGAACAAATGAACCACT 1542
Db 1 GCTCTCAAGCCCTCTCCATAAAGCTCTATCGGGAACAAATGAACCACT 50
RESULT 9
ADC17041
ID ADC17041 standard; DNA; 51 BP.
XX
AC ADC17041;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human single nucleotide polymorphism (SNP) region Seq ID143.
XX
KW sequence polymorphism analysis; human identity; human relatedness;
KW single nucleotide polymorphism; SNP; genetic disease; cytostatic;
KW immunosuppressive; antiinflammatory; neuroprotective; antimicrobial;
KW fatty acid metabolism; glycolysis; amino acid metabolism;
KW paternity analysis; forensic; autoimmune disease; cancer; nervous system;
KW infection; pathogenic microorganism; human; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT variation replace(26,G)
FT /*tag= a
FT /standard_name= "Single nucleotide polymorphism"
XX
PN WO200029622-A2.
XX
PD 25-MAY-2000.
XX
PF 17-NOV-1999; 99WO-US027283.
XX
PR 17-NOV-1998; 98US-0109024P.
PR 16-NOV-1999; 99US-00443199.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Shinkets RA, Leach MD;
XX
DR WPI; 2000-399731/34.
DR P-PSDB; ADC16824.
XX
PT Novel polynucleotide and polypeptide including one or more single
PT nucleotide polymorphisms, useful for diagnosing and treating conditions
PT associated with the presence of sequence polymorphism in humans and
PT animals.
XX
PS Claim 1; SEQ ID NO 143; 187pp; English.
XX
CC This invention relates to novel isolated nucleotide sequences which
CC comprise 217 defined polymorphic sequences. Sequence polymorphism-based
CC analysis of nucleic acid sequences can augment or replace previously
CC known methods for determining the identity and relatedness of
CC individuals. Single nucleotide polymorphisms (SNPs) tend to occur with
CC great frequency throughout the genome and may be located close to loci of
CC interest. Such variations can cause or be closely linked to pathological
CC conditions (genetic diseases). Hence the SNPs of the invention may be
CC useful in the development of compounds with cytostatic,
CC immunosuppressive, antiinflammatory, neuroprotective or antimicrobial
CC activities. Regulators of metabolic pathways such as fatty acid

CC metabolism, glycolysis, and amino acid metabolism may also be developed.
CC The compounds may be useful for treating a subject suffering from or at
CC risk for a pathology associated with the presence of a sequence
CC polymorphism. SNP detection is also useful in paternity analysis and
CC forensic application. Polymorphisms may contribute to the phenotype of an
CC organism and phenotypic traits include genetic diseases such as
CC autoimmune diseases, cancer, diseases of the nervous system and infection
CC by pathogenic microorganisms. The present sequence is the sequence
CC surrounding and including a human SNP of the invention.
XX
SQ Sequence 51 BP; 22 A; 6 C; 14 G; 9 T; 0 U; 0 Other;
Query Match 1.8%; Score 49.4; DB 1; Length 51;
Best Local Similarity 98.0%; Pred. No. 12;
Matches 50; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1618 CTATGGGAGTCGTCAGATTATATCTGGAAGAGGAAACAGAGAGCTAAA 1668
Db 1 CTATGGGAGTCGTCAGATTATATCTGGAAGAGGAAACAGAGAGCTAAA 51
RESULT 10
ADC17040
ID ADC17040 standard; DNA; 51 BP.
XX
AC ADC17040;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human single nucleotide polymorphism (SNP) region Seq ID142.
XX
KW sequence polymorphism analysis; human identity; human relatedness;
KW single nucleotide polymorphism; SNP; genetic disease; cytostatic;
KW immunosuppressive; antiinflammatory; neuroprotective; antimicrobial;
KW fatty acid metabolism; glycolysis; amino acid metabolism;
KW paternity analysis; forensic; autoimmune disease; cancer; nervous system;
KW infection; pathogenic microorganism; human; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT variation replace(26,C)
FT /*tag= a
FT /standard_name= "Single nucleotide polymorphism"
XX
PN WO200029622-A2.
XX
PD 25-MAY-2000.
XX
PF 17-NOV-1999; 99WO-US027283.
XX
PR 17-NOV-1998; 98US-0109024P.
PR 16-NOV-1999; 99US-00443199.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Shinkets RA, Leach MD;
XX
DR WPI; 2000-399731/34.
DR P-PSDB; ADC16823.
XX
PT Novel polynucleotide and polypeptide including one or more single
PT nucleotide polymorphisms, useful for diagnosing and treating conditions
PT associated with the presence of sequence polymorphism in humans and
PT animals.
XX
PS Claim 1; SEQ ID NO 142; 187pp; English.
XX
CC This invention relates to novel isolated nucleotide sequences which
CC comprise 217 defined polymorphic sequences. Sequence polymorphism-based
CC analysis of nucleic acid sequences can augment or replace previously
CC known methods for determining the identity and relatedness of
CC individuals. Single nucleotide polymorphisms (SNPs) tend to occur with


```
Matches 49; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2638 GTGATGGTGTAGCCCTCCACCTTGTGCTTCTTACTTACTTGCCTGAAT 2687
    |||||||
Db 1 GTGATGGTGTAGCCCTCCACCTTGTGCTTCTTACTTACTTGCCTGAAT 50

RESULT 13
ABZ00089
ID ABZ00089 standard; DNA; 50 BP.
XX
AC ABZ00089;
XX
DT 09-JAN-2003 (first entry)
XX
DE Human leukocyte gene expression profiling probe SEQ ID NO 80.
XX
KW T7; leukocyte; gene expression profiling; allograft rejection;
KW atherosclerosis; congestive heart failure; systemic lupus erythematosus;
KW rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200257414-A2.
XX
PD 25-JUL-2002.
XX
PF 22-OCT-2001; 2001WO-US047856.
XX
PR 20-OCT-2000; 2000US-0241994P.
PR 08-JUN-2001; 2001US-0296764P.
XX
PA (BIOC-) BIOCARDIA INC.
XX
PI Wohlgemuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
PI Ly N, Woodward R, Quertemous T, Johnson F;
XX
WPI; 2002-636525/68.
XX
XX New system for leukocyte expression profiling, diagnosing a disease, or
PT monitoring (the rate of) progression of a disease, e.g. atherosclerosis
PT or congestive heart failure, comprises diagnostic oligonucleotides.
XX
PS Claim 1; Page 330; 0pp; English.
XX
CC The invention relates to a system for detecting gene expression, which
CC comprises one or two isolated DNA molecules that detect expression of a
CC gene, where the gene corresponds to any of 8143 oligonucleotides
CC (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
CC for leukocyte expression profiling. It is particularly useful for
CC diagnosing a disease, monitoring (rate of) progression of a disease,
CC predicting therapeutic outcome, determining prognosis for a patient,
CC predicting disease complications in an individual or monitoring response
CC to treatment in an individual. The diseases include cardiac allograft
CC rejection, kidney allograft rejection, liver allograft rejection,
CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
XX
SQ Sequence 50 BP; 6 A; 14 C; 11 G; 19 T; 0 U; 0 Other;

Query Match 1.8%; Score 48.4; DB 1; Length 50;
Best Local Similarity 98.0%; Pred. No. 14;
Matches 49; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2629 GTTGCCATGTGATGGTGTAGCCCTCCACTTTGCTGTTCTTACTTTAC 2678
    |||||||
Db 1 GTTGCCATGTGATGGTGTAGCCCTCCACTTTGCTGTTCTTACTTTAC 50

RESULT 14
ADL33738/c
ID ADL33738 standard; DNA; 35 BP.
```

```
XX ADL33738;
AC
XX 03-JUN-2004 (first entry)
DT
XX LNA capture probe #1.
DE
XX Detection; isolation; locked nucleic acid; LNA; probe; ss.
KW
XX Synthetic.
OS
XX Key modified_base 1 Location/Qualifiers
FH /*tag= a
FT /mod_base= OTHER
FT /note= "5' AQ2, where AQ is anthraquinone"
FT modified_base 16.35
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Optionally LNA nucleotides"
XX
PN WO2004020575-A2.
XX
XX 11-MAR-2004.
XX
XX 20-JUN-2003; 2003WO-IB006354.
XX
XX 24-JUN-2002; 2002US-0390928P.
PR
XX (EXIQ-) EXIQON AS.
XX
XX Kauppinen S, Jacobsen N;
XX
XX WPI; 2004-315512/29.
XX
XX Detecting and/or isolating nucleic acid molecule having homopolymeric
PT sequence or repetitive element or conserved nucleotide sequence involves
PT treating sample containing nucleic acid compounds with locked nucleic
PT acid oligonucleotide.
XX
XX Claim 23; Page 67; 104pp; English.
XX
XX The present invention relates to a method (M1) for detecting and/or
CC isolating a nucleic acid having a homopolymeric sequence or repetitive
CC element or conserved nucleotide sequence. (M1) comprises treating a
CC sample containing nucleic acid compounds with an locked nucleic acid
CC (LNA) oligonucleotide (LO) to thereby detect and/or isolate a nucleic
CC acid having the homopolymeric sequence or repetitive element or conserved
CC nucleotide sequence. (M1) is useful for detecting and isolating nucleic
CC acids released from a lysed complex biological mixture comprising nucleic
CC acids. The present sequence is a LNA capture probe, used to illustrate
CC the invention.
XX
SQ Sequence 35 BP; 0 A; 0 C; 0 G; 35 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 35;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
    |||||||
Db 35 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 15
AEA16041/c
ID AEA16041 standard; DNA; 35 BP.
XX
XX AEA16041;
AC
XX
XX 28-JUL-2005 (first entry)
DT
XX Cy3-labeled polynucleotide modification PCR primer 2.
DE
```



```

XX KW PCR; primer; ss.
XX OS Unidentified.
XX FH Key modified_base 1 Location/Qualifiers
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER = Labeled with Cy3"
FT 31
FT modified_base 31
FT misc_difference 32. .35
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER = Linked to unidentified chemical group in
FT the absence of bases 32-35"
FT 35
FT /tag= c
FT /note= "Optionally absent"
XX WO2005044836--A2.
XX 19-MAY-2005.
XX 05-NOV-2004; 2004WO-EP012556.
XX 05-NOV-2003; 2003DE-01051636.
XX 05-DEC-2003; 2003DE-01056837.
XX (GENO-) GENOVOXX GMBH.
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX Cherkasov D, Hennig C;
XX WPI; 2005-372185/38.
XX New conjugates useful for modifying nucleic acid chains comprise
XX nucleotide or nucleoside molecules coupled to a label through water-
XX soluble polymer linkers.
XX Example 34B; Page 123; 212pp; German.
XX The invention relates to novel conjugates comprising 1-100 nucleotide or
XX nucleoside molecules coupled to a label through water-soluble polymer
XX linkers. The conjugates of the invention may be useful for modifying
XX nucleic acid chains via coupling reactions catalyzed by DNA polymerase,
XX RNA polymerase or terminal transferase enzymes or by phosphoramidite
XX coupling, e.g. for labeling nucleic acids in arrays bound to a solid
XX phase. The current sequence is that of the Cy3-labeled polynucleotide
XX modification PCR primer 2 of the invention.
XX SQ Sequence 35 BP; 0 A; 0 C; 0 G; 35 T; 0 U; 0 Other;
XX Query Match 1.3%; Score 35; DB 1; Length 35;
XX Best Local Similarity 100.0%; Pred. No. 95;
XX Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
XX |
XX 35 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX Db
XX RESULT 16
XX AEE86826/c
XX ID AEE86826 standard; DNA; 35 BP.
XX AC AEE86826;
XX XX
XX 23-FEB-2006 (first entry)
XX DE Novel solid phase-related oligonucleotide Oligo dT35-Cy3 #1.
XX DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.

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```

XX OS Synthetic.
XX FH Key modified_base 1 Location/Qualifiers
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Cy3"
XX DE102004025746-A1.
XX 15-DEC-2005.
XX 26-MAY-2004; 2004DE-10025746.
XX 26-MAY-2004; 2004DE-10025746.
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVOXX GMBH.
XX Cherkasov D, Hennig C, Baeuml E;
XX WPI; 2006-040183/05.
XX Parallel sequencing of nucleic acids by optical methods, by cyclic primer
XX -matrix extension, using a solid phase with reduced non-specific binding
XX of labeled components.
XX Example 8; Page 92; 144pp; German.
XX This invention relates to a novel method for parallel sequence analysis
XX of nucleic acids (NA) by optical means using a novel solid phase (SP).
XX The SP is useful for multiple parallel sequencing of nucleic acids and
XX shows reduced non-specific binding of labeled or unlabeled nucleotides
XX and nucleic acids, so the background remains low even after prolonged and
XX repeated contact of the solid phase with high concentrations of labeled
XX reagents. The present sequence is that of an oligonucleotide which was
XX used in the development of the novel method of the invention.
XX SQ Sequence 35 BP; 0 A; 0 C; 0 G; 35 T; 0 U; 0 Other;
XX Query Match 1.3%; Score 35; DB 1; Length 35;
XX Best Local Similarity 100.0%; Pred. No. 95;
XX Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
XX |
XX 35 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX Db
XX RESULT 17
XX AEF94731/c
XX ID AEF94731 standard; DNA; 35 BP.
XX AC AEF94731;
XX XX
XX 20-APR-2006 (first entry)
XX DE Optical DNA analysis process-related oligonucleotide dT35-Cy3.
XX ss; dna detection; DNA sequencing; DNA amplification; oligo dT35-Cy3.
XX OS Unidentified.
XX OS Synthetic.
XX FH Key modified_base 1 Location/Qualifiers
XX FT /tag= b
XX FT /mod_base= 5'-Cy3
XX DE102004025696-A1.
XX

```

```

PD 23-FEB-2006.
XX
PF 26-MAY-2004; 2004DE-10025696.
XX
PR 26-MAY-2004; 2004DE-10025696.
XX
PA (CHER/) CHERKASOV D.
PA (HENN/) HENNIG C.
XX (GENO-) GENOVXX GMBH.
XX
PI Cherkasov D, Hennig C, Baeuml E;
XX WPI; 2006-185820/20.
XX
PT Ultra-high parallel analysis process to analyse nucleic acid chains in
PT which a sample solid is bound and substrate material.
XX
PS Example 8; Page 90; 141pp; German.
XX
CC This invention relates to a novel optical fluorescent process to analyse
CC nucleic acid chains. Using the method, a sample solid is bound with a
CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
CC are incorporated in the primer matrix by enzyme reaction, followed by
CC washing of the solid phase. The marked nucleotides are detected and their
CC co-ordinates logged and the signals removed. The marked nucleotides are
CC detected and their co-ordinates logged and the signals removed. The solid
CC phase is then washed and the sequence repeated as necessary. The Nucleic
CC acid chain sequence is then reconstructed using the signals. The process
CC is faster, more efficient and cheaper than prior art. Further claimed is
CC that the process able to determine many sequences in parallel. The
CC present sequence is that of oligonucleotide dT35-Cy3 which was used in
CC the development of the novel process of the invention.
XX
SQ Sequence 35 BP; 0 A; 0 C; 0 G; 35 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 35;
Best Local Similarity 100.0%; Pred. No. 95;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
DB 35 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 18
AAZ57404/c
ID AAZ57404 standard; DNA; 38 BP.
XX
AC AAZ57404;
XX
XX 07-APR-2000 (first entry)
XX
DE Hepatitis C virus PCR primer CAC-T35 SEQ ID NO:19.
XX
KW Hepatitis C virus; RNA virus; replication; viral infection; PCR primer;
XX ss.
XX
OS Hepatitis C virus.
XX
PN W09967394-A1.
XX
XX 29-DEC-1999.
XX
XX 24-JUN-1999; 99WO-JP003380.
XX
PR 24-JUN-1998; 98JP-00177820.
XX
XX (CHUS ) CHUGAI SEIYAKU KK.
XX
XX Kohara M, Kohara K, Taira K, Matsuzaki J, Ohmori H;
XX WPI; 2000-106296/09.
XX
XX

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PT Vectors expressing full-length gene of RNA viruses, useful in clarifying
PT mechanisms of RNA viral replication, infection, and developing remedies
PT and therapeutics.
XX
XX Example 2; Page 20; 46pp; Japanese.
XX
CC The present invention describes a vector comprising a cDNA encoding an
CC RNA virus gene, constructed to ensure the exact and homogeneous
CC transcription of both terminals of the RNA virus gene. Also described is
CC a method for screening drugs for inhibiting the replication of RNA virus
CC by using the RNA viral infection model animal, particularly one with
CC hepatitis C viral infection. The vector is useful in clarifying the
CC mechanism of RNA viral replication, onset of RNA viral infection, and
CC developing remedies and therapeutics for RNA viral infections.
CC particularly of a hepatitis C virus. The present sequence represents a
CC PCR primer which is used in the exemplification of the present invention
XX
SQ Sequence 38 BP; 1 A; 2 C; 0 G; 35 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 38;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
DB 38 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 4

RESULT 19
ADN35261/c
ID ADN35261 standard; DNA; 39 BP.
XX
AC ADN35261;
XX
XX 01-JUL-2004 (first entry)
XX
DE Probe sequence used for hybridization tests #3.
XX
XX secondary-ion mass spectrometry; gene analysis; disease diagnosis;
KW species identification; ss; probe.
XX
OS Synthetic.
XX
PN W02004003532-A1.
XX
PD 08-JAN-2004.
XX
PF 26-JUN-2003; 2003WO-JP008104.
XX
PR 28-JUN-2002; 2002JP-00190010.
PR 28-JUN-2002; 2002JP-00191391.
PR 28-JUN-2002; 2002JP-00191414.
XX
XX (CANO ) CANON KK.
XX
XX Okamoto T, Takase H, Hashimoto H;
XX WPI; 2004-203385/19.
XX
XX Analysis of probe supports or nucleic acids on nucleic acid chips by
PT halogen-based time-of-flight secondary-ion mass spectrometry, applicable
PT in gene analysis, disease diagnosis and species identification.
XX
PS Example; SEQ ID NO 6; 68pp; Japanese.
XX
CC The present invention relates to detecting a probe located and/or a
CC target capable of binding specifically to the probe on a substrate
CC comprises the preparation of a substrate with the probe and/or the target
CC for specific binding to the probe located on its surface, and measurement
CC of the substrate surface by time- of-flight secondary-ion mass
CC spectrometry with labeling. The method is for analyzing probe supports or
CC nucleic acids on nucleic acid chips with detection and quantitation of
CC probe conditions and hybrid of probe with target nucleic acid, which is

```

CC applicable in gene analysis, disease diagnosis and species
 CC identification. The present sequence represents a probe sequence used for
 CC hybridization tests.

XX Sequence 39 BP; 0 A; 0 C; 0 G; 38 T; 1 U; 0 Other;
 Query Match 1.3%; Score 35; DB 1; Length 39;
 Best Local Similarity 100.0%; Pred. No. 1e+02;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
 |||||
 Db 39 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5

RESULT 20
 AAQ25031/c
 ID AAQ25031 standard; DNA; 40 BP.

XX AAQ25031;
 XX 13-JUL-1992 (first entry)
 XX Oligonucleotide specific for HIV proviral DNA.
 XX HIV; thiolation; reverse transcriptase; primer; inhibition; homooligomer;
 XX ss.

XX Synthetic.

XX WO9203127-A.

XX 05-MAR-1992.

XX 15-AUG-1991; 91WO-US005919.

XX 16-AUG-1990; 90US-00568131.

XX (UYNV-) RES FOUND UNIV NEW.

XX Bardos TJ, Ho YK, Aradi J, Schinazi RF;
 XX WPI; 1992-096567/12.

XX Compens. contg. 5-thiolated (oligo-poly-) nucleotide(s) - for treating HIV
 PT infection, AIDS and for preventing HIV-1 infection.
 XX Disclosure; Page 11; 42pp; English.

XX The oligomer comprises a non-thiolated (binding) homooligonucleotide

CC region (d(T)12) to promote the binding of the remaining portion of the
 CC 5-thiolated oligonucleotide (MdU 28) to a homopurine site of the viral
 CC genome via triple-helix formations. The oligo is used to in the treatment
 CC of HIV. See also AAQ22624-27 and AAQ25017-Q25032

XX Sequence 40 BP; 0 A; 0 C; 0 G; 12 T; 28 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
 Best Local Similarity 100.0%; Pred. No. 1e+02;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
 |||||
 Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 21
 AAA39649/c
 ID AAA39649 standard; DNA; 40 BP.

XX AAA39649;

XX 11-SEP-2000 (first entry)

XX

DE Primer used in construction of hybrid CAT RNA.

XX Control element; translation enhancer; pestivirus homology box IV;

KW immune response; viral infection; primer; ss.

XX Unidentified.

OS US6057093-A.

XX 02-MAY-2000.

XX 12-MAY-1995; 95US-00439996.

XX 28-SEP-1992; 92US-00952799.

XX 28-SEP-1993; 93US-00128583.

XX (CHIR) CHIRON CORP.

XX Han JH, Spaete RR, Suh BS, Selby MJ, Houghton M, Yoo BJ;

XX WPI; 2000-338599/29.

XX Enhancing translation of coding region of hepatitis C virus involves
 PT making RNA molecule comprising the coding region and 5' untranslated
 PT region comprising a sequence fully homologous to pestivirus homology box
 PT IV.
 XX Disclosure; Col 19-20; 16pp; English.

XX

CC This invention describes a novel method for enhancing translation of a
 CC coding region which involves making an RNA molecule, comprising the
 CC coding region operably linked to a 5' untranslated region (UTR)
 CC comprising a sequence fully homologous to pestivirus homology box IV, and
 CC then translating it so that the translation of the coding region is
 CC enhanced. The method is useful for enhancing or controlling the
 CC translation of HCV nucleic acid, which allows stronger immune responses,
 CC where blocking or decreasing translation of viral nucleic acid may
 CC decrease the pathology of viral infection. This sequence represents a
 CC primer which is used in the construction of hybrid CAT RNA's described in
 CC the method of the invention

XX Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
 Best Local Similarity 100.0%; Pred. No. 1e+02;
 Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
 |||||
 Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 22

ADH56159/c

ID ADH56159 standard; DNA; 40 BP.

XX ADH56159;

XX 25-MAR-2004 (first entry)

XX Oligonucleotide probe SEQ ID NO:1.

XX probe support; nucleic probe region; probe; probe support analysis;
 KW TOF-SIMS analysis; ss.
 XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1 /*tag= a

FT /mod_base= OTHER

FT /note= "5' HS-(CH2)6-O-PO2-O-T"

FT

```

XX PN WO2004003531-A1.
XX PD 08-JAN-2004.
XX PF 26-JUN-2003; 2003WO-JP08092.
XX PR 28-JUN-2002; 2002JP-00191533.
XX PA (CANO ) CANON KK.
XX PI Takase H, Okamoto T, Aiba T, Hashimoto H;
XX DR WPI; 2004-083158/08.
XX PT Probe support contains nucleic probe region having nucleic probes fixed
XX PT therein and enables accurate analysis of probes using TOP-SIMS.
XX PS Example 5; SEQ ID NO 1; 59pp; Japanese.
XX
XX The present invention describes a probe support containing a nucleic
XX probe region having nucleic probes fixed to it. Also described is a probe
XX support analysis method. The probe support can be used for the TOP-SIMS
XX analysis of nucleic acid probes by forming a phosphorus-containing region
XX usable as a standard on a substrate, nucleic probes located as a matrix
XX on a nucleic acid chip substrate can be accurately and quantitatively
XX analysed. The support enables accurate analysis. The present sequence
XX represents a probe which is used in an example from the present
XX invention.
XX
XX Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;
SQ
Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6
RESULT 23
ADH76858/c
ID ADH76858 standard; DNA; 40 BP.
XX AC ADH76858;
XX
XX 22-APR-2004 (first entry)
XX
XX Probe related to the invention, SEQ ID 9.
XX
XX DNA microarray; gene analysis; disease diagnosis; species identification;
XX probe; ss.
XX
XX Synthetic.
XX
XX WO2004001412-A1.
XX
XX 31-DEC-2003.
XX
XX 23-JUN-2003; 2003WO-JP007918.
XX
XX 24-JUN-2002; 2002JP-00183249.
XX
XX 28-JUN-2002; 2002JP-00191390.
XX
XX (CANO ) CANON KK.
XX
XX Kawaguchi M, Okamoto T, Takase H, Hashimoto H;
XX WPI; 2004-099140/10.
XX
XX DNA microarrays having standard probes for detecting target nucleic acid
XX molecules in specimens, applicable in gene analysis, disease diagnosis
PT
and species identification.
XX
XX Example 10; SEQ ID NO 9; 52pp; Japanese.
XX
XX The invention relates to a DNA microarray for detecting a target nucleic
XX acid molecule in a specimen, comprising a nucleic acid probe that has a
XX base sequence substantially complementary to the base sequence of the
XX target nucleic acid molecule immobilised onto a substrate. The
XX microarrays are applicable in gene analysis, disease diagnosis and
XX species identification. With such reliable microarrays, the detection of
XX target nucleic acid molecules can be conveniently and quickly achieved,
XX with high accuracy and improved reproducibility and quantitation even in
XX a high-throughput system. In the microarray with a matrix shape, it is
XX possible to show images of distribution of formation density of a
XX nucleic acid probe-dot system. Various internal and external-standard
XX probes were prepared biologically by enzyme digestion or cleavage, and
XX synthetically, for immobilisation onto a glass substrate e.g. after
XX screen-printing at defined density distribution in a pattern. The current
XX sequence represents a probe related to the invention.
XX
XX Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;
SQ
Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6
RESULT 24
ADK70561/c
ID ADK70561 standard; DNA; 40 BP.
XX AC ADK70561;
XX
XX 06-MAY-2004 (first entry)
XX
XX Nucleic acid sequence detection-related oligonucleotide SeqID1.
XX
XX nucleic acid base sequence detection; target nucleic acid; annealing;
XX hybrid; dideoxy nucleotide triphosphate; deoxynucleotide triphosphate;
XX mass spectrometry; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 1
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER= Bound to O-PO2-(CH2)6-SH"
XX
XX JP2004033043-A.
XX
XX 05-FEB-2004.
XX
XX 28-JUN-2002; 2002JP-00191520.
XX
XX 28-JUN-2002; 2002JP-00191520.
XX
XX (CANO ) CANON KK.
XX
XX WPI; 2004-218622/21.
XX
XX Detecting nucleic acid base sequence by fixing primer on board partial
XX structure cut by light with in 5' side of primer, adding target nucleic
XX acid as template, performing PCR, analyzing sequence based molecular
XX weight.
XX
XX Example 1; SEQ ID NO 1; 23pp; Japanese.
XX
XX This invention relates to a novel method of detecting a nucleic acid base

```

CC sequence, which comprises fixing on board a partial structure cut by
CC light within the 5' side of primer, adding a target nucleic acid as a
CC template, performing annealing to form a hybrid, extending the hybrid
CC using four sorts of dideoxy nucleotide triphosphate, deoxynucleotide
CC triphosphate, removing the template, irradiating with light and analysing
CC the sequence of extension part based molecular weight obtained by mass
CC spectrometry. The invention is useful for determining the base sequence
CC of a number of nucleic acids effectively and efficiently in a short time.
CC The present sequence is that of an oligonucleotide which was used in the
CC exemplification of the invention.

XX SQ Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 25

ID ADK67293/c
ADK67293 standard; RNA; 40 BP.

AC ADK67293;

DT 06-MAY-2004 (first entry)

DE RNA sequence target of novel nucleic acid detection method SeqID 1.

XX DNA probe carrier; secondary ion mass spectroscopy time of flight; ss;
KW nucleic acid detection.

XX Synthetic.

FT Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= HS-(CH2)6-O-PO2-O, optionally absent"

XX JP2004024203-A.

XX 29-JAN-2004.

XX 28-JUN-2002; 2002JP-00189838.

XX 28-JUN-2002; 2002JP-00189838.

XX (CANO) CANON KK.

XX WPI; 2004-127107/13.

XX Analysis of target nucleic acid e.g., RNA or DNA, by making sample react
FT with probe carrier having probes complementary to target and detecting
PT the hybrid by time-of-flight type secondary ion mass spectrometry.

XX Example 2; SEQ ID NO 2; 1lpp; Japanese.

XX This invention relates to a novel analytical method to target nucleic
CC acid molecules in a sample. Specifically, it refers to a DNA probe
CC carrier that has two or more types of probe that are complementary to the
CC base sequence of the target RNA molecule such that the hybrid structure
CC can subsequently be identified by secondary ion mass spectroscopy time of
CC flight. The present invention describes a method that overcomes the
CC problems associated with using radioactive isotopes or fluorescence to
CC identify the nucleic acid molecules of interest. Accordingly, this method
CC provides a means for the acquisition of accurate gene information. This
CC oligonucleotide sequence is a target RNA sequence of the invention.

XX SQ Sequence 40 BP; 0 A; 0 C; 0 G; 0 T; 40 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 26

ID ADK67292
ADK67292 standard; DNA; 40 BP.

AC ADK67292;

DT 06-MAY-2004 (first entry)

DE DNA probe used for nucleic acid detection method SeqID 1.

XX DNA probe carrier; secondary ion mass spectroscopy time of flight; ss;
KW nucleic acid detection.

XX Synthetic.

FT Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= HS-(CH2)6-O-PO2-O, optionally absent"

XX JP2004024203-A.

XX 29-JAN-2004.

XX 28-JUN-2002; 2002JP-00189838.

XX 28-JUN-2002; 2002JP-00189838.

XX (CANO) CANON KK.

XX WPI; 2004-127107/13.

XX Analysis of target nucleic acid e.g., RNA or DNA, by making sample react
PT with probe carrier having probes complementary to target and detecting
PT the hybrid by time-of-flight type secondary ion mass spectrometry.

XX Example 1; SEQ ID NO 1; 1lpp; Japanese.

XX This invention relates to a novel analytical method to target nucleic
CC acid molecules in a sample. Specifically, it refers to a DNA probe
CC carrier that has two or more types of probe that are complementary to the
CC base sequence of the target RNA molecule such that the hybrid structure
CC can subsequently be identified by secondary ion mass spectroscopy time of
CC flight. The present invention describes a method that overcomes the
CC problems associated with using radioactive isotopes or fluorescence to
CC identify the nucleic acid molecules of interest. Accordingly, this method
CC provides a means for the acquisition of accurate gene information. This
CC oligonucleotide sequence is a DNA probe of the invention.

XX SQ Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 27

ADJ71299/c

```

ID ADJ71299 standard; DNA; 40 BP.
XX
AC ADJ71299;
XX
DT 06-MAY-2004 (first entry)
XX
DE Method of analysing substance using mass spectrometry probe #1.
XX
KW ss; probe; mass spectrometry; MALDI-TOF MS; light.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "modified by HS-(CH2)6-O-PO-O"
XX
XX WO2004003539-A1.
XX
XX 08-JAN-2004.
XX
XX 27-JUN-2003; 2003WO-JP008197.
XX
XX 28-JUN-2002; 2002JP-00191535.
XX
XX (CANO ) CANON KK.
XX
XX Okamoto T;
XX
XX WPI; 2004-203386/19.
XX
PT Acquiring mass of immobilized substance, using mass spectrometry, by
PT fixing substance to substrate using partial structure to be disconnected
PT by light in bonded part, analyzing mass spectrum of substance after
PT disconnecting structure.
XX
XX Example 1; Page 47; 81pp; English.
XX
XX The present invention relates to a method of analysing a substance on a
XX substrate using mass spectrometry (MALDI-TOF MS). The method involves
XX using a structure including a partial structure to be disconnected by
XX light to fix the substance on the substrate, irradiating the substance
XX fixed to the substrate with light for inducing the disconnection of the
XX partial structure to be disconnected by light, and analysing the mass
XX spectrum of the substance which is brought in an unfixed state by
XX disconnecting the partial structure by the irradiation of light. The
XX method can be used to acquire data from a bio-chip. The present sequence
XX is a probe used to demonstrate the method of the invention.
XX
SQ Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 28
ADL71382/c
ID ADL71382 standard; DNA; 40 BP.
XX
AC ADL71382;
XX
XX 20-MAY-2004 (first entry)
XX
XX Labelled DNA oligonucleotide probe SeqID 1.
XX
XX nucleic acid chip substrate; probe; matrix;
XX environment-control type scanning electron microscope; ss.
XX

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XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= HS-(CH2)6-O-PO2-O label"
XX
XX JP2004037112-A.
XX
XX 05-FEB-2004.
XX
XX 28-JUN-2002; 2002JP-00190998.
XX
XX 28-JUN-2002; 2002JP-00190998.
XX
XX (CANO ) CANON KK.
XX
XX WPI; 2004-185125/18.
XX
XX Nucleic acid chip substrate, comprising nucleic acid probe and related
XX nucleic acid substances arranged in matrix form on substrate surface.
XX
XX Example 1; SEQ ID NO 1; 17pp; Japanese.
XX
XX This invention relates to a novel method for developing nucleic acid chip
XX substrates. Specifically, it refers to a chip that comprises a nucleic
XX acid probe and related nucleic acid substances arranged in a matrix form
XX on the chip substrate surface. The present invention describes observing
XX binding to the nucleic acid probe by an environment-control type scanning
XX electron microscope and determining the quality of the dot shape
XX produced. This oligonucleotide sequence is a DNA probe of the invention.
XX
XX SQ Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 29
ADL71383
ID ADL71383 standard; DNA; 40 BP.
XX
AC ADL71383;
XX
XX 20-MAY-2004 (first entry)
XX
XX Labelled DNA oligonucleotide probe SeqID 2.
XX
XX nucleic acid chip substrate; probe; matrix;
XX environment-control type scanning electron microscope; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 1 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= HS-(CH2)6-O-PO2-O label"
XX
XX JP2004037112-A.
XX
XX 05-FEB-2004.
XX
XX 28-JUN-2002; 2002JP-00190998.
XX
XX 28-JUN-2002; 2002JP-00190998.
XX

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XX PA (CANO ) CANON KK.
XX WPI; 2004-185125/18.
XX Nucleic acid chip substrate, comprising nucleic acid probe and related
XX nucleic acid substances arranged in matrix form on substrate surface.
XX Example 3; SEQ ID NO 2; 17pp; Japanese.
XX This invention relates to a novel method for developing nucleic acid chip
XX substrates. Specifically, it refers to a chip that comprises a nucleic
XX acid probe and related nucleic acid substances arranged in a matrix form
XX on the chip substrate surface. The present invention describes observing
XX binding to the nucleic acid probe by an environment-control type scanning
XX electron microscope and determining the quality of the dot shape
XX produced. This oligonucleotide sequence is a DNA probe of the invention.
XX Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.3%; Score 35; DB 1; Length 40;
XX Best Local Similarity 100.0%; Pred. No. 1e+02;
XX Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
XX Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35
XX
XX RESULT 30
XX ADL78812/c
XX ID ADL78812 standard; DNA; 40 BP.
XX AC ADL78812;
XX XX
XX DT 20-MAY-2004 (first entry)
XX DE Labelled DNA oligonucleotide probe SeqID 1.
XX KW organic device; manufacturing; X-ray source; probe; ss.
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= HS- (CH2)6-O-PO2-O 5' label"
XX
XX PN JP2004037108-A.
XX XX
XX PD 05-FEB-2004.
XX XX
XX PF 28-JUN-2002; 2002JP-00190830.
XX XX
XX PR 28-JUN-2002; 2002JP-00190830.
XX XX
XX PA (CANO ) CANON KK.
XX XX
XX DR WPI; 2004-139693/14.
XX XX
XX Testing surface state of organic device in manufacturing organic device
XX has organic film containing organic compound having sample holding base.
XX
XX PS Example 1; SEQ ID NO 1; 10pp; Japanese.
XX XX
XX CC This invention relates to a novel method for testing the surface state of
XX an organic device used in manufacturing. Specifically, it refers to an
XX organic film containing an organic compound, which has a sample holding
XX base (SB) that can be detected by using an X-ray source to centre on and
XX measure the position of the sample holding base by identifying the
XX specific angle of reflection. The present invention describes an organic
XX film that contains a number of bio-related substances such as a biochip

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CC arranged in matrix form on the substrate. In the manufacturing process,
CC the laminated film of the biochip can be analysed repeatedly in a high
CC throughput manner. This oligonucleotide sequence is a labelled DNA probe
CC used in an exemplification of the invention.
XX
XX SQ Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;
XX
XX Query Match 1.3%; Score 35; DB 1; Length 40;
XX Best Local Similarity 100.0%; Pred. No. 1e+02;
XX Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
XX Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6
XX
XX RESULT 31
XX ADM16960/c
XX ID ADM16960 standard; DNA; 40 BP.
XX XX
XX AC ADM16960;
XX XX
XX DT 03-JUN-2004 (first entry)
XX XX
XX DE Probe immobilised substrate method associated DNA probe #26.
XX XX
XX KW Probe immobilised substrate; surface analysis method;
XX scanning electron microscopy; atomic force microscopy;
XX time-of-flight secondary ion mass spectrometry; TOP-SIMS; probe array;
XX genome analysis; gene expression analysis; cancer; hereditary disease;
XX infectious disease; photoelectron spectroscopy; probe; ss.
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Modified by thiol (SH) group"
XX
XX PN US2004053308-A1.
XX XX
XX PD 18-MAR-2004.
XX XX
XX PF 18-JUN-2003; 2003US-00463549.
XX XX
XX PR 28-JUN-2002; 2002JP-00189836.
XX PR 28-JUN-2002; 2002JP-00190009.
XX XX
XX PA (CANO ) CANON KK.
XX XX
XX PI Nakamura K;
XX DR WPI; 2004-338612/31.
XX XX
XX PT Probe immobilized substrate e.g. for DNA probe, has colored metal or
XX metal compound provided at prescribed spots for locating probe spots.
XX
XX PS Example 7; SEQ ID NO 26; 30pp; English.
XX XX
XX CC The present invention relates to a probe immobilised substrate and a
XX method for its manufacture. The probes can be located using a surface
XX analysis method e.g. scanning electron microscopy, atomic force
XX microscopy, and time-of-flight secondary ion mass spectrometry (TOP-SIMS)
XX method. The invention also discloses a method for analysing the probe
XX array, and a method for detecting the probe and target material. The
XX invention is useful for probe immobilised substrates such as DNA probes
XX such as single strand DNA probes, single strand RNA probes, single strand
XX peptide nucleic acid (PNA) probes, protein probes for genome analysis and
XX gene expression analysis for diagnosis of cancer, hereditary disease,
XX life-style disease, infectious disease, forecast of prognosis and
XX determination of therapeutic strategies, using electron microscopy, the
XX photoelectron spectroscopy, atomic force microscopy, and TOP-SIMS. The

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CC invention reduces the time for searching the positions of probe array
 CC spots, hence reliable images are obtained quickly, thereby enabling
 CC efficient and accurate analysis, at low cost. The present sequence
 CC represents a DNA probe used in the exemplification of the present
 CC invention.

SQ Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;

Best Local Similarity 100.0%; Pred. No. 1e+02;

Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743

Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 32

ADN35256/c

ID ADN35256 standard; DNA; 40 BP.

AC ADN35256;

DT 01-JUL-2004 (first entry)

XX Probe sequence used for hybridization tests #1.

XX secondary-ion mass spectrometry; gene analysis; disease diagnosis;

KW species identification; ss; probe.

XX Synthetic.

XX WO2004003532-A1.

XX 08-JAN-2004.

XX 26-JUN-2003; 2003WO-JP008104.

XX 28-JUN-2002; 2002JP-00190010.

PR 28-JUN-2002; 2002JP-00191391.

PR 28-JUN-2002; 2002JP-00191414.

XX (CANO) CANON KK.

XX Okamoto T, Takase H, Hashimoto H;

XX WPI; 2004-203385/19.

XX Analysis of probe supports or nucleic acids on nucleic acid chips by
 PT halogen-based time-of-flight secondary-ion mass spectrometry, applicable
 PT in gene analysis, disease diagnosis and species identification.

XX Example; SEQ ID NO 1; 68pp; Japanese.

XX The present invention relates to detecting a probe located and/or a
 CC target capable of binding specifically to the probe on a substrate
 CC comprises the preparation of a substrate with the probe and/or the target
 CC for specific binding to the probe located on its surface, and measurement
 CC of the substrate surface by time- of-flight secondary-ion mass
 CC spectrometry with labeling. The method is for analyzing probe supports or
 CC nucleic acids on nucleic acid chips with detection and quantitation of
 CC probe conditions and hybrid of probe with target nucleic acid, which is
 CC applicable in gene analysis, disease diagnosis and species
 CC identification. The present sequence represents a probe sequence used for
 CC hybridization tests.

XX Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;

Best Local Similarity 100.0%; Pred. No. 1e+02;

Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743

Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 33

ADN35263/c

ID ADN35263 standard; DNA; 40 BP.

AC ADN35263;

XX 01-JUL-2004 (first entry)

XX Probe sequence used for hybridization tests #5.

XX secondary-ion mass spectrometry; gene analysis; disease diagnosis;

KW species identification; ss; probe.

XX Synthetic.

XX WO2004003532-A1.

XX 08-JAN-2004.

XX 26-JUN-2003; 2003WO-JP008104.

XX 28-JUN-2002; 2002JP-00190010.

PR 28-JUN-2002; 2002JP-00191391.

PR 28-JUN-2002; 2002JP-00191414.

XX (CANO) CANON KK.

XX Okamoto T, Takase H, Hashimoto H;

XX WPI; 2004-203385/19.

XX Analysis of probe supports or nucleic acids on nucleic acid chips by
 PT halogen-based time-of-flight secondary-ion mass spectrometry, applicable
 PT in gene analysis, disease diagnosis and species identification.

XX Example; SEQ ID NO 8; 68pp; Japanese.

XX The present invention relates to detecting a probe located and/or a
 CC target capable of binding specifically to the probe on a substrate
 CC comprises the preparation of a substrate with the probe and/or the target
 CC for specific binding to the probe located on its surface, and measurement
 CC of the substrate surface by time- of-flight secondary-ion mass
 CC spectrometry with labeling. The method is for analyzing probe supports or
 CC nucleic acids on nucleic acid chips with detection and quantitation of
 CC probe conditions and hybrid of probe with target nucleic acid, which is
 CC applicable in gene analysis, disease diagnosis and species
 CC identification. The present sequence represents a probe sequence used for
 CC hybridization tests.

XX Sequence 40 BP; 0 A; 0 C; 0 G; 35 T; 5 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 40;

Best Local Similarity 100.0%; Pred. No. 1e+02;

Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743

Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 34

ADN35257

ID ADN35257 standard; DNA; 40 BP.

AC ADN35257;

XX 01-JUL-2004 (first entry)

XX Target sequence of the invention #1.

XX	secondary-ion mass spectrometry; gene analysis; disease diagnosis;
KW	species identification; ds.
XX	Synthetic.
OS	
XX	WO2004003532-A1.
PN	
XX	08-JAN-2004.
PD	
XX	26-JUN-2003; 2003WO-JP008104.
PF	
XX	28-JUN-2002; 2002JP-00190010.
PR	
XX	28-JUN-2002; 2002JP-00191391.
PR	
XX	28-JUN-2002; 2002JP-00191414.
XX	
XX	(CANO) CANON KK.
PA	
XX	
XX	Okamoto T, Takase H, Hashimoto H;
PI	
XX	WPI; 2004-203385/19.
DR	
XX	
PT	Analysis of probe supports or nucleic acids on nucleic acid chips by
PT	halogen-based time-of-flight secondary-ion mass spectrometry, applicable
PT	in gene analysis, disease diagnosis and species identification.
XX	
XX	Example; SEQ ID NO 2; 68pp; Japanese.
PS	
XX	
CC	The present invention relates to detecting a probe located and/or a
CC	target capable of binding specifically to the probe on a substrate
CC	comprises the preparation of a substrate with the probe and/or the target
CC	for specific binding to the probe located on its surface, and measurement
CC	of the substrate surface by time-of-flight secondary-ion mass
CC	spectrometry with labeling. The method is for analyzing probe supports or
CC	nucleic acids on nucleic acid chips with detection and quantitation of
CC	probe conditions and hybrid of probe with target nucleic acid, which is
CC	applicable in gene analysis, disease diagnosis and species
CC	identification. The present sequence represents a target sequence used
CC	for hybridization tests.
XX	
XX	Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ	
	Query Match 1.3%; Score 35; DB 1; Length 40;
	Best Local Similarity 100.0%; Pred. No. 1e+02;
	Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0
QY	2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db	1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35
RESULT 35	
ID	ADN35264/C
XX	ADN35264 standard; DNA; 40 BP.
XX	
AC	ADN35264;
XX	
DT	01-JUL-2004 (first entry)
XX	
DE	Probe sequence used for hybridization tests #6.
XX	
KW	secondary-ion mass spectrometry; gene analysis; disease diagnosis;
KW	species identification; ds.
XX	
OS	Synthetic.
XX	
XX	WO2004003532-A1.
PN	
XX	08-JAN-2004.
PD	
XX	
XX	26-JUN-2003; 2003WO-JP008104.
PF	
XX	28-JUN-2002; 2002JP-00190010.
PR	
XX	

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PS Example; SEQ ID NO 10; 60pp; Japanese.
XX
CC The present invention relates to detecting a probe located and/or a
CC target capable of binding specifically to the probe on a substrate
CC comprises the preparation of a substrate with the probe and/or the target
CC for specific binding to the probe located on its surface, and measurement
CC of the substrate surface by time- of-flight secondary-ion mass
CC spectrometry with labeling. The method is for analyzing probe supports or
CC nucleic acids on nucleic acid chips with detection and quantitation of
CC probe conditions and hybrid of probe with target nucleic acid, which is
CC applicable in gene analysis, disease diagnosis and species
CC identification. The present sequence represents a target sequence used
CC for hybridization tests.
XX
SQ Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 37
AED51679
ID AED51679 standard; DNA; 40 BP.
XX
AC AED51679;
XX
XX 29-DEC-2005 (first entry)
XX
XX Modified nucleic acid used in intermolecular interaction measurement #2.
XX
XX Intermolecular interaction; probe; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1
XX /*tag= a
XX /mod_base= OTHER
XX /note= "HS-(CH2)6-O-PO2-O-Adenine"
XX
XX JP2005283433-A.
XX
XX 13-OCT-2005.
XX
XX 30-MAR-2004; 2004JP-00099903.
XX
XX 30-MAR-2004; 2004JP-00099903.
XX
XX (CANO ) CANON KK.
XX
XX Takada K;
XX
XX WPI; 2005-708750/73.
XX
XX Probe for measuring device of intermolecular interaction of organic
XX molecule, comprises probe portion coated with electroconductive film and
XX organic film.
XX
XX Example 1; Page 7; 11pp; Japanese.
XX
XX The invention relates to a probe comprising a probe portion (3) coated
XX with an electroconductive film (4) and an organic film (5) by chemical
XX bonds through a sulfur atom. Further disclosed is a method for
XX manufacture of the probe, and a method for measuring intermolecular
XX interactions. The method of the invention is useful for creating a
XX measuring device e.g. scanning probe microscope (SPM) and atomic force
XX microscope (AFM) used for measuring an intermolecular interaction in
XX samples, such as organic molecules e.g. deoxyribonucleic acid (DNA).
XX
XX Example 1; Page 7; 11pp; Japanese.
XX
XX The invention relates to a probe comprising a probe portion (3) coated
XX with an electroconductive film (4) and an organic film (5) by chemical
XX bonds through a sulfur atom. Further disclosed is a method for
XX manufacture of the probe, and a method for measuring intermolecular
XX interactions. The method of the invention is useful for creating a
XX measuring device e.g. scanning probe microscope (SPM) and atomic force
XX microscope (AFM) used for measuring an intermolecular interaction in
XX samples, such as organic molecules e.g. deoxyribonucleic acid (DNA).
XX

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CC Probes of the invention enable stable measurement of organic molecules
CC fixed on substrate by a simple structure. The current sequence represents
CC a nucleic acid sequence used in an example of the invention.
XX
SQ Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 38
AED51678/c
ID AED51678 standard; DNA; 40 BP.
XX
AC AED51678;
XX
XX 29-DEC-2005 (first entry)
XX
XX Modified nucleic acid used in intermolecular interaction measurement #1.
XX
XX Intermolecular interaction; probe; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1
XX /*tag= a
XX /mod_base= OTHER
XX /note= "HS-(CH2)6-O-PO2-O-Thymine"
XX
XX JP2005283433-A.
XX
XX 13-OCT-2005.
XX
XX 30-MAR-2004; 2004JP-00099903.
XX
XX 30-MAR-2004; 2004JP-00099903.
XX
XX (CANO ) CANON KK.
XX
XX Takada K;
XX
XX WPI; 2005-708750/73.
XX
XX Probe for measuring device of intermolecular interaction of organic
XX molecule, comprises probe portion coated with electroconductive film and
XX organic film.
XX
XX Example 1; Page 7; 11pp; Japanese.
XX
XX The invention relates to a probe comprising a probe portion (3) coated
XX with an electroconductive film (4) and an organic film (5) by chemical
XX bonds through a sulfur atom. Further disclosed is a method for
XX manufacture of the probe, and a method for measuring intermolecular
XX interactions. The method of the invention is useful for creating a
XX measuring device e.g. scanning probe microscope (SPM) and atomic force
XX microscope (AFM) used for measuring an intermolecular interaction in
XX samples, such as organic molecules e.g. deoxyribonucleic acid (DNA).
XX
XX Probes of the invention enable stable measurement of organic molecules
XX fixed on substrate by a simple structure. The current sequence represents
XX a nucleic acid sequence used in an example of the invention.
XX
XX Sequence 40 BP; 0 A; 0 C; 0 G; 40 T; 0 U; 0 Other;
Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 6

RESULT 39
AED68744
ID AED68744 standard; DNA; 40 BP.
AC AED68744;
XX
XX 12-JAN-2006 (first entry)
XX
DE 40mer poly-A detecting DNA probe.
XX
KW DNA detection; hybridization; diagnosis; infection; antimicrobial;
KW biochip; ss; probe.
XX
OS Unidentified.
XX
PN WO2005103695-A1.
XX
PD 03-NOV-2005.
XX
PF 25-APR-2005; 2005WO-JP008374.
XX
PR 23-APR-2004; 2004JP-00128940.
XX
PA (MATU ) MATSUSHITA ELECTRIC IND CO LTD.
PA (MICR-) MICROTEC CO LTD.
PI Maeda M, Akimoto K, Hori J, Murayama R, Tabata J, Bando K;
XX
XX WPI; 2005-769097/78.
XX
PT Detecting target gene with specific sequence by adding intercalator to
PT double-stranded nucleic acid formed by adding sample having single-
PT stranded target, to probe, performing photo irradiation and detecting
PT intercalator bound nucleic acid.
XX
XX Example 2; SEQ ID NO 3; 35pp; Japanese.
XX
CC The new invention relates to a method for detecting (M1) a target gene
CC having a specific sequence in a specimen, by adding a single-stranded
CC sample, to an electrode with an immobilized probe comprising a
CC complementary sequence of the target, therefore forming double-stranded
CC nucleic acid by hybridization, adding intercalator, carrying out photo
CC irradiation such that intercalator binds with double-stranded nucleic
CC acid and detecting intercalator bound nucleic acid. Also claimed are a
CC gene detector, which detects a gene having a specific sequence, in a
CC specimen. In (M1), the electrochemical measurement applies voltage with
CC respect to the electrode, and the electrochemical light-emission quantity
CC by the double-stranded nucleic acid is covalently bonded with the
CC intercalating agent, is measured. The intercalating agent is specifically
CC inserted in the double-stranded nucleic acid, where the intercalating
CC agent includes a compound which has the double-stranded nucleic acid
CC binding region which covalently binds the double-stranded nucleic acid by
CC light irradiation, the electrochemical active site which has
CC electrochemical activity, and the connection region which connects the
CC double-stranded nucleic acid binding region and the electrochemical
CC active site. (M1) is useful in gene diagnosis and/or infectious disease
CC diagnosis. The new sequence is a 40mer poly-A detecting DNA probe.
XX
XX Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

```

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RESULT 40
AEF24436
ID AEF24436 standard; DNA; 40 BP.
XX
XX AEF24436;
AC
XX 09-MAR-2006 (first entry)
XX
XX 40mer poly A DNA sequence.
XX
KW DNA detection; diagnosis; infection; antimicrobial; drug discovery; ss.
XX
OS Unidentified.
XX
PN WO2006003991-A1.
XX
PD 12-JAN-2006.
XX
PF 30-JUN-2005; 2005WO-JP012080.
XX
PR 06-JUL-2004; 2004JP-00199157.
XX
PA (MATU ) MATSUSHITA ELECTRIC IND CO LTD.
XX
PI Hori J, Murayama R, Tabata J, Bando K, Egashira N;
XX
XX WPI; 2006-090483/09.
XX
PT Gene detection method for detecting genes having specific sequences,
PT involves adding sample to electrode having probe, hybridizing sample and
PT probe, adding intercalating agent, performing light irradiation and
PT detecting agents forming bonds.
XX
XX Example 1; Page 25; 40pp; Japanese.
XX
CC The new invention relates to a gene detection method. Specifically
CC described is a method of detecting genes having specific sequences, by
CC denaturing a sample, immobilizing single stranded probes on an electrode,
CC adding sample to the electrode, hybridizing the sample with the probe to
CC form a double stranded nucleic acid, adding an intercalating agent to
CC electrode, carrying out light irradiation for covalent bonds forming
CC between nucleic acid and agent and detecting agent forming a covalent
CC bond by electrochemical measurement. Also described is the intercalating
CC agent comprising a compound of formula Fa-La-Ia (1) having substituent (s)
CC comprising compounds represented by -Ib-Ib and -Lc-Pb at each of the
CC sites, where Fa and Pb are electrochemically active site having an
CC electrochemical activity, Ia and Ib are double stranded nucleic acid
CC binding site which is to be inserted specifically into the double
CC stranded nucleic acid and is capable of forming a covalent bond with the
CC double stranded nucleic acid upon light irradiation, and La, Ib and Lc
CC are linking sites that links the double stranded nucleic acid binding
CC site to the electrochemically active site. In (M1), the Fa and Pb, and Ia
CC and Ib are respectively the same compounds. The detection process
CC comprises applying a voltage with respect to the electrode, and measuring
CC the electrochemical light-emission quantity by the covalent bonded double
CC stranded nucleic acid and intercalating agent. The compound that has
CC photosensitivity is a furcoumarin derivative, preferably a psoralen
CC derivative. (M1) is useful in gene diagnosis, infectious diseases
CC diagnosis and genome based drug discovery. Note: The sequence data for
CC this patent did not form part of the printed specification, but was
CC obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences. The present sequence is a 40-
CC mer poly A DNA sequence related to the invention.
XX
XX Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 1.3%; Score 35; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743

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Tue Nov 7 10:41:34 2006

ngs.res

```
Db      1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 41
AEF05826
ID AEF05826 standard; DNA; 40 BP.
XX
XX
AC AEF05826;
XX
XX 23-MAR-2006 (first entry)
XX
XX PolYA target sequence, SEQ ID NO:3.
XX
XX DNA detection; hybridization; probe; ss.
XX
XX Synthetic.
XX
XX JP2006020525-A.
XX
XX 26-JAN-2006.
XX
XX 06-JUL-2004; 2004JP-00199156.
XX
XX 06-JUL-2004; 2004JP-00199156.
XX
XX (MATU ) MATSUSHITA DENKI SANGYO KK.
XX
XX Horii J, Murayama R, Tabata N, Bando K, Egashira N;
XX
XX WPI; 2006-113221/12.
XX
XX Detecting gene with specific sequence, by denaturing gene sample into
XX single-stranded molecule, reacting single-stranded nucleic acid with
XX nucleic acid probe immobilized on electrode, and electrochemically
XX detecting bound nucleic acid.
XX
XX Example 1; SEQ ID NO 3; 15pp; Japanese.
XX
XX The invention relates to a method for detecting a gene with a specific
XX sequence. The method involves: (a) hybridizing a target nucleic acid to a
XX probe immobilized on an electrode; (b) contacting the resulting duplex
XX with a photoactivatable intercalating agent that has an electrochemical
XX active site; (c) irradiating the complex so that the intercalating agent
XX forms a covalent bond to the DNA duplex; and (d) detecting the DNA duplex
XX via an electrochemical measurement (especially electrochemical light
XX emission). The method of the invention is useful for detecting a gene
XX with specific sequence and is applicable in gene diagnosis, infection or
XX disease diagnosis and genome based drug discovery. By covalently
XX attaching the intercalating agent to the DNA duplex, the background noise
XX associated with non-specific adsorption of an intercalating agent to
XX double-stranded DNA is reduced, making the method highly sensitive. The
XX present sequence represents a polyA 40-mer used as a control target
XX sequence in detection of a human cytochrome P450 gene target sequence
XX (AEF05825) in an example of the invention.
XX
XX Sequence 40 BP; 40 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.3%; Score 35; DB 1; Length 40;
XX Best Local Similarity 100.0%; Pred. NO. 1e+02;
XX Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
      |||||
Db      1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 42
ADN35262/C
ID ADN35262 standard; DNA; 41 BP.
XX
XX
AC ADN35262;
XX
XX 01-JUL-2004 (first entry)
XX

Probe sequence used for hybridization tests #4.
secondary-ion mass spectrometry; gene analysis; disease diagnosis;
species identification; ss; probe.
Synthetic.
WO2004003532-A1.
08-JAN-2004.
26-JUN-2003; 2003WO-JP008104.
28-JUN-2002; 2002JP-00190010.
28-JUN-2002; 2002JP-00191391.
28-JUN-2002; 2002JP-00191414.
(CANO ) CANON KK.
Okamoto T, Takase H, Hashimoto H;
WPI; 2004-203385/19.
Analysis of probe supports or nucleic acids on nucleic acid chips by
halogen-based time-of-flight secondary-ion mass spectrometry, applicable
in gene analysis, disease diagnosis and species identification.
Example; SEQ ID NO 7; 69pp; Japanese.
The present invention relates to detecting a probe located and/or a
target capable of binding specifically to the probe on a substrate
comprises the preparation of a substrate with the probe and/or the target
for specific binding to the probe located on its surface, and measurement
of the substrate surface by time- of-flight secondary-ion mass
spectrometry with labeling. The method is for analyzing probe supports or
nucleic acids on nucleic acid chips with detection and quantitation of
probe conditions and hybrid of probe with target nucleic acid, which is
applicable in gene analysis, disease diagnosis and species
identification. The present sequence represents a probe sequence used for
hybridization tests.
Sequence 41 BP; 0 A; 0 C; 0 G; 38 T; 3 U; 0 Other;
Query Match 1.3%; Score 35; DB 1; Length 41;
Best Local Similarity 100.0%; Pred. NO. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
      |||||
Db      41 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 7

RESULT 43
ADO41099
ID ADO41099 standard; cDNA; 41 BP.
XX
XX
AC ADO41099;
XX
XX 26-AUG-2004 (first entry)
XX
XX Human cDNA probe useful for disease diagnosis #250.
XX
XX ss; probe; human; bacteria; virus; prion; parasite; fungus; drug;
XX allergen; influenza; malaria; yellow fever; multiple sclerosis;
XX Alzheimer's disease; lung cancer; breast cancer; stomach cancer.
XX
XX Homo sapiens.
XX
XX WO2004046382-A2.
XX
XX 03-JUN-2004.
XX
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PF 21-NOV-2003; 2003WO-GB005102.
XX
PR 21-NOV-2002; 2002GB-00027238.
XX
PA (DIAG-) DIAGENIC AS.
PA (JONE/) JONES E L.
XX
XX Sharma P, Sahni NS, Loenneborg A;
PI WPI; 2004-420641/39.
XX
DR Set of oligonucleotide probes, useful for diagnosing breast cancer or
XX Alzheimer's disease, comprising specific number of oligonucleotides.
PT Disclosure; SEQ ID NO 648; 301pp; English.
XX
PS The invention relates to a set (I) of oligonucleotide probes (P1),
CC comprising at least 10 oligonucleotides chosen from oligonucleotide from
CC list of probes informative for disease diagnosis, as given in the
CC specification. (I) comprising P1 is useful for determining gene
CC expression pattern of a cell, for preparing a standard gene transcript
CC pattern characteristic of a disease or condition or its stage in an
CC organism, for preparing a test gene transcript pattern, for diagnosing or
CC identifying or monitoring a disease or condition or its stage in an
CC organism. (I) is useful in diagnosing or identifying or monitoring any
CC condition, ailment, disease or reaction that leads to the relative
CC increase or decrease in the activity of information genes of any organism
CC regardless whether the changes caused by the influence of bacteria,
CC virus, prions, parasites, fungi, drugs or allergens, where the diseases
CC influenza, malaria, yellow fever, multiple sclerosis, Alzheimer's disease
CC or cancer such as lung cancer, breast cancer and stomach cancer. (I)
CC enables analysis of gene expression within cells which provides
CC information on the state of those cells and importantly the state of the
CC individual from which the cells are derived. (I) enables early detection
CC of a disease or condition or its stage after the onset of the disease or
CC condition, even years before other subjective or objective symptoms
CC appear. (I) enables prevention of the possibility of poor analysis, e.g.,
CC misdiagnosis by comparison to other diseases. The present sequence
CC represents a human cDNA probe useful for disease diagnosis.
XX
SQ Sequence 41 BP; 41 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 41;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 44
AAD17216/c
ID AAD17216 standard; DNA; 43 BP.
AC
XX AAD17216;
XX
XX 29-NOV-2001 (first entry)
XX
XX Human mRNA hybridisation selection reaction biotin-dT3 oligonucleotide.
XX
XX Human; multiplex ligation-dependent amplification; amplicon;
KW single nucleotide polymorphism; hybridisation selection reaction; ss.
XX
XX Homo sapiens.
XX
XX Key modified_base 1 Location/Qualifiers
FT /*tag= a
FT /*mod_base= OTHER
FT /*note= "Biotin-labelled Thymidine"
XX
XX WO200161033-A2.

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XX 23-AUG-2001.
XX
XX 15-FEB-2001; 2001WO-EP001739.
XX
PR 15-FEB-2000; 2000EP-00200506.
XX
XX (SCHO/) SCHOUTEN J P.
XX
XX Schouten JP;
XX
XX WPI; 2001-550053/61.
XX
XX An improved multiplex ligation-dependent amplification method for
PT detecting specific single stranded target nucleic acids in samples.
XX
XX Example 8; Page 137; 158pp; English.
XX
XX The invention relates to an improved multiplex ligation-dependent
CC amplification method for detecting specific single stranded target
CC nucleic acids in samples using a plurality of probe sets comprising at
CC least 2 probes. Each probe comprises a target specific region and a non-
CC complementary region comprising a primer binding site. The probes in each
CC set are ligated when hybridised to a target nucleic acid and amplified by
CC a primer set. The method is used for detecting a nucleotide polymorphism,
CC especially a single nucleotide polymorphism; detecting multiple single
CC stranded target nucleic acid sequences (through the detection of multiple
CC amplicons); determining the absolute or relative abundance of multiple
CC single stranded nucleic acids in a sample; and detection of a break point
CC region in rearranged nucleic acids. By using a femtomolar amount of the
CC probes, a large number of different probe sets can be used to
CC simultaneously detect and quantify a corresponding large number of target
CC labelled fluorescent oligonucleotide. The present DNA sequence is biotin-dT3
CC selection reaction of human mRNA samples
XX
SQ Sequence 43 BP; 0 A; 0 C; 0 G; 43 T; 0 U; 0 Other;

Query Match 1.3%; Score 35; DB 1; Length 43;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 43 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 9

RESULT 45
AEA32851
ID AEA32851 standard; DNA; 34 BP.
AC
XX AEA32851;
XX
XX 28-JUL-2005 (first entry)
XX
XX NS5B genotype 2b RNA recovery primer, dA(34).
XX
XX NS5B; replicon; hepatitis C virus infection; antiinflammatory;
KW hepatotropic; virucide; ss; PCR; primer.
XX
XX Synthetic.
XX
XX WO2005047463-A2.
XX
XX 26-MAY-2005.
XX
XX 03-NOV-2004; 2004WO-US036575.
XX
PR 05-NOV-2003; 2003US-0517605P.
XX
XX (MERI ) MERCK & CO INC.
PA (RICE-) IST RICERCHE BIOL MOLECOLARE ANGELETTI.
XX

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PI Ludmerer SW, Graham DJ, Lafemina RL, Flores OA, Pizzuti M;
PI Traboni C;
XX WPI; 2005-372359/38.
XX
XX Enhancing ability of genotype 2b NS5B sequence to function in replicon
PT for producing replicons containing functional genotype 2b NS5B, and
PT measuring ability of compound to inhibit replicon activity, useful for
PT treating hepatitis C.
XX
XX Example 1; SEQ ID NO 5; 46pp; English.
PS
XX The invention relates to a novel method for enhancing the ability of a
CC genotype 2b NS5B sequence to function in a replicon. The method comprises
CC altering either or both the genotype 2b NS5B sequence to encode one or
CC more adaptive mutations, or a genotype 1b NS4B sequence to encode an
CC adaptive mutation of alanine at position 218 of a fully defined 261 amino
CC acid (AEA32874) sequence given in the specification. The invention
CC further comprises: a method for producing a chimeric replicon, comprising
CC replacing substantially all of an NS5B sequence of a hepatitis C virus
CC (HCV) replicon encoding a fully defined 1394 amino acid (AEA32849)
CC sequence, with a genotype 2b NS5B encoding nucleic acid sequence; a
CC chimeric replicon comprising an NS3-5A sequence of a genotype 1b replicon
CC or a modified 2b NS3-5A sequence of a genotype 1b replicon, where NS4B
CC contains a Val-218-Ala modification, and substantially all of a genotype
CC 2b NS5B encoding nucleic acid sequence; and a recombinant cell comprising
CC a replicon of one of the methods or chimeric replicon, where the replicon
CC is expressed in the cell. The method has virucide activity. The method is
CC useful for enhancing the ability of a genotype 2b NS5B sequence to
CC function in a replicon. The chimeric replicon and recombinant cell are
CC useful for measuring the ability of a compound to inhibit replicon
CC activity. The compounds tested can be used to treat or inhibit the onset
CC of hepatitis C virus (HCV) infection in a patient. The method is useful
CC for producing replicons containing functional genotype 2b NS5B. This
CC oligo sequence represents a primer used in the exemplification of the
CC novel method of the invention.
XX
XX Sequence 34 BP; 34 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 1.2%; Score 34; DB 1; Length 34;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 34
RESULT 46
ID AEB86391 standard; DNA; 34 BP.
AC AEB86391;
XX
XX 06-OCT-2005 (first entry)
DT
XX Reverse primer used in PCR1 to amplify NS5B RNA from HCV genotypes.
DE
XX non-structural protein; NS5B; pharmaceutical;
KW hepatitis C virus infection; antiinflammatory; hepatotropic; virucide;
KW gastrointestinal disease; infection; PCR; primer; ss.
XX Hepatitis C virus.
OS
XX WO2005070957-A1.
PN
XX
XX 04-AUG-2005.
PD
XX
XX 06-JAN-2005; 2005WO-US000292.
PF
XX
XX 09-JAN-2004; 2004US-0535708P.
PR
XX
XX (MERI) MERCK & CO INC.

XX Graham DJ, Simcoe AL, Ludmerer SW, Flores OA, Lafemina RL;
PI WPI; 2005-533995/54.
XX
XX Novel purified hepatitis C virus RNA-dependent RNA polymerase e.g. NS5B
PT polypeptide, useful for evaluating ability of its inhibitor.
XX
XX Example 1; SEQ ID NO 12; 39pp; English.
PS
XX The specification describes non-structural protein NS5B from clinically
CC important hepatitis C virus (HCV) genotypes. NS5B is a RNA-dependent RNA
CC polymerase. NS5B polypeptides and polynucleotides are useful for
CC evaluating inhibitors of NS5B. These inhibitors may be used to treat HCV
CC infection. PCR primers AEB86390 and AEB86392-AB86393 were used in a
CC nested PCR reaction to amplify NS5B RNA, with PCR primer AEB86391 as the
CC reverse primer in PCR1. The primers were used for rescue and
CC characterization of NS5B.
XX
XX Sequence 34 BP; 34 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 1.2%; Score 34; DB 1; Length 34;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 34
RESULT 47
ID ABK99272 standard; RNA; 36 BP.
XX
XX ABK99272;
AC
XX 21-OCT-2002 (first entry)
DT
XX Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #2.
DE
XX Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
KW
XX Synthetic.
OS
XX US2002064771-A1.
PN
XX 30-MAY-2002.
PD
XX
XX 06-APR-2001; 2001US-00828034.
PF
XX
XX 07-APR-2000; 2000US-0195852P.
PR
XX (ZHON/) ZHONG W.
PA (HONG/) HONG Z.
XX (FERR/) FERRARI E.
PA
XX
XX Zhong W, Hong Z, Ferrari E;
PI
XX WPI; 2002-582330/62.
DR
XX Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
PT nucleotide-long template to which a 2 nucleotide-long primer is annealed,
PT and template and primer which do not form a stable duplex in the absence
PT of HCV NS5B.
XX
XX Example; Page 6; 17pp; English.
PS
XX The invention relates to a replicase complex comprising a hepatitis C
CC virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
CC complementary nucleic acid primer which is annealed to the 3' terminus of
CC the template, where the template is at least three nucleotides and the
CC primer is two or three nucleotides, and the template and primer do not
CC form a stable duplex in solution in the absence of the HCV NS5B protein.

CC The complex is useful for detecting HCV replicase activity and permits
 CC establishment of sensitive RNA-dependent RNA polymerase assays to screen
 CC and evaluate antiviral inhibitors and to improve the specificity and
 CC efficacy of the inhibitors. The complex is also useful in the development
 CC of a reliable system for determining kinetic and thermodynamic constants
 CC of HCV NS5B-catalysed nucleotide incorporation and investigation of
 CC mechanistic inhibitors for mis-incorporation or chain termination.
 CC Specifically, the short RNA template and primer pairs are useful in
 CC screening assays which are used for determining kinetic, thermodynamic
 CC and mechanistic properties of NS5B replication and ultimately in the
 CC development of inhibitors of NS5B. Newly identified inhibitors of
 CC replicase activity may be used for developing anti-HCV pharmaceuticals.
 CC Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
 CC templates

XX Sequence 36 BP; 34 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 1.2%; Score 34; DB 1; Length 36;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
 |||||
 Db 3 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 36

RESULT 48

AAAD27116
 ID AAD27116 standard; RNA; 36 BP.

XX
 AC AAD27116;

DT 09-APR-2002 (first entry)

XX RNA template, AA used to direct RNA synthesis by HCV RNA polymerase.

XX Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;

KW lead compound; RNA polymerase; ss.

XX Unidentified.

XX US6322966-B1.

XX 27-NOV-2001.

XX 11-MAY-1999; 99US-00309670.

XX 11-MAY-1999; 99US-00309670.

XX (ZHONG/) ZHONG W.
 PA (HONG/) HONG Z.
 PA (LAUJ/) LAU J Y N.

PI Zhong W, Hong Z, Lau JYN;

XX WPI; 2002-096587/13.

XX Assay system for hepatitis C virus replicase activity comprises RNA
 PT template with unstable, small stemloop capable of forming copy-back
 PT structure, viral non-structural protein 5B, nucleoside triphosphates,
 PT buffer.

XX Example 1; Fig 1A; 10pp; English.

XX The present invention relates to an assay system for hepatitis C virus
 CC (HCV) replicase activity. The assay system comprises an RNA template that
 CC has an unstable, small stemloop at the 3' end capable of forming a copy-
 CC back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP,
 CC and UTP nucleoside triphosphates (NTPs), where one of the NTP is
 CC radiolabelled and an assay buffer that supports replication activity of
 CC NS5B. The invention also relates to the identification of optimal
 CC properties of an RNA template for copy-back self-priming RNA synthesis of
 CC HCV. This activity can be used to screen for anti-HCV replicase compounds

CC or to characterise the biological relevance of lead compounds. The
 CC optimal RNA templates can be used for developing a system to characterise
 CC HCV NS5B polymerase mechanistically and kinetically and for designing
 CC small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay
 CC system of the invention is useful for detecting HCV replicase activity.
 CC The nucleic acid synthesised by NS5B is detected by evaluating an
 CC autoradiograph of reaction products separated by gel electrophoresis. The
 CC present sequence is RNA template, AA used to direct RNA synthesis by RNA
 CC polymerase proteins of HCV, BVDV and poliovirus. This sequence is used in
 CC the exemplification of the invention

XX Sequence 36 BP; 34 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 1.2%; Score 34; DB 1; Length 36;
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;
 Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
 |||||
 Db 3 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 36

RESULT 49

AAAL07487
 ID AAL07487 standard; DNA; 38 BP.

XX
 AC AAL07487;

DT 21-NOV-2001 (first entry)

XX Human reproductive system related antigen DNA SEQ ID NO: 10175.

XX Human; reproductive system related antigen; reproductive system disorder;
 KW cancer; gene therapy; ds.

XX Homo sapiens.

XX WO200155320-A2.

XX 02-AUG-2001.

XX 17-JAN-2001; 2001WO-US001339.

XX 31-JAN-2000; 2000US-0179065P.

PR 04-FEB-2000; 2000US-0180628P.

PR 24-FEB-2000; 2000US-0184564P.

PR 02-MAR-2000; 2000US-0186350P.

PR 16-MAR-2000; 2000US-0189874P.

PR 17-MAR-2000; 2000US-0190076P.

PR 18-APR-2000; 2000US-0198123P.

PR 19-MAY-2000; 2000US-0205515P.

PR 07-JUN-2000; 2000US-0209467P.

PR 28-JUN-2000; 2000US-0214886P.

PR 30-JUN-2000; 2000US-0215135P.

PR 07-JUL-2000; 2000US-0216647P.

PR 11-JUL-2000; 2000US-0217487P.

PR 14-JUL-2000; 2000US-0218290P.

PR 26-JUL-2000; 2000US-0220963P.

PR 26-JUL-2000; 2000US-0220964P.

PR 14-AUG-2000; 2000US-0224518P.

PR 14-AUG-2000; 2000US-0224519P.

PR 14-AUG-2000; 2000US-0225213P.

PR 14-AUG-2000; 2000US-0225214P.

PR 14-AUG-2000; 2000US-0225266P.

PR 14-AUG-2000; 2000US-0225267P.

PR 14-AUG-2000; 2000US-0225268P.

PR 14-AUG-2000; 2000US-0225270P.

PR 14-AUG-2000; 2000US-0225447P.

PR 14-AUG-2000; 2000US-0225757P.

PR 14-AUG-2000; 2000US-0225758P.

PR 14-AUG-2000; 2000US-0225759P.

PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
XX Rosen CA, Barash SC, Ruben SM;
PI WPI; 2001-465570/50.
XX
XX Isolated nucleic acid molecule encoding a reproductive system antigen is
PT used in preventing, treating or ameliorating a medical condition.
XX
XX Disclosure; SEQ ID NO 10175; 1297pp + Sequence Listing; English.
XX
XX The present invention provides the protein and coding sequences of a
CC number of human reproductive system related antigens. These can be used
CC in the prevention and treatment of reproductive system disorders,
CC including cancer. The present sequence is a genomic sequence encoding a
CC protein of the invention
XX
XX Sequence 38 BP; 34 A; 1 C; 2 G; 1 T; 0 U; 0 Other;
SQ
Query Match 1.2%; Score 34; DB 1; Length 38;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 34; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 34
RESULT 50
ADO41321
ID ADO41321 standard; cDNA; 40 BP.
XX
AC ADO41321;
XX
XX 26-AUG-2004 (first entry)
XX
XX Human cDNA probe useful for disease diagnosis #472.
XX
XX ss; probe; human; bacteria; virus; prion; parasite; fungus; drug;
KW

PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.

KW allergen; influenza; malaria; yellow fever; multiple sclerosis;
 KW Alzheimer's disease; lung cancer; breast cancer; stomach cancer.
 OS Homo sapiens.
 XX WO2004046382-A2.
 XX 03-JUN-2004.
 XX 21-NOV-2003; 2003WO-GB005102.
 XX 21-NOV-2002; 2002GB-00027238.
 XX (DIAG-) DIAGENIC AS.
 XX (JONE/) JONES E L.
 XX Sharma P, Sahni NS, Loenneborg A;
 XX WPI; 2004-420641/39.
 XX Set of oligonucleotide probes, useful for diagnosing breast cancer or
 XX Alzheimer's disease, comprising specific number of oligonucleotides.
 XX Disclosure; SEQ ID NO 1378; 301pp; English.
 XX The invention relates to a set (I) of oligonucleotide probes (p1),
 XX comprising at least 10 oligonucleotides chosen from oligonucleotide from
 XX list of probes informative for disease diagnosis, as given in the
 XX specification. (I) comprising p1 is useful for determining gene
 XX expression pattern of a cell, for preparing a standard gene transcript
 XX pattern characteristic of a disease or condition or its stage in an
 XX organism, for preparing a test gene transcript pattern, for diagnosing or
 XX identifying or monitoring a disease or condition or its stage in an
 XX organism. (I) is useful in diagnosing or identifying or monitoring any
 XX condition, ailment, disease or reaction that leads to the relative
 XX increase or decrease in the activity of information genes of any organism
 XX regardless whether the changes caused by the influence of bacteria,
 XX virus, prions, parasites, fungi, drugs or allergens, where the diseases
 XX influenza, malaria, yellow fever, multiple sclerosis, Alzheimer's disease
 XX or cancer such as lung cancer, breast cancer and stomach cancer. (I)
 XX enables analysis of gene expression within cells which provides
 XX information on the state of those cells and importantly the state of the
 XX individual from which the cells are derived. (I) enables early detection
 XX of a disease or condition or its stage after the onset of the disease or
 XX condition, even years before other subjective or objective symptoms
 XX appear. (I) enables prevention of the possibility of poor analysis, e.g.,
 XX misdiagnosis by comparison to other diseases. The present sequence
 XX represents a human cDNA probe useful for disease diagnosis.
 XX
 SQ Sequence 40 BP; 31 A; 2 C; 2 G; 5 T; 0 U; 0 Other;
 Query Match 1.2%; Score 33.6; DB 1; Length 40;
 Best Local Similarity 90.0%; Pred. No. 1.3e+02;
 Matches 36; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 2696 CTAAGTTGTACTAAAAA 2735
 |||||
 Db 1 CTGAGTATTAACTAAAAA 40
 RESULT 51
 ABN89412
 ID ABN89412 standard; DNA; 40 BP.
 XX
 AC ABN89412;
 XX
 XX 30-AUG-2002 (first entry)
 XX Polymorphism detection related oligonucleotide SEQ ID NO:4.
 DE Polymorphism; detection; mass spectroscopy; ss.
 KW Synthetic.
 XX

XX WO200250307-A1.
 XX 27-JUN-2002.
 XX 12-DEC-2001; 2001WO-JP010892.
 XX 12-DEC-2000; 2000JP-00378091.
 XX (CHUS) CHUGAI SEIYAKU KK.
 XX Inoko H, Tamiya G, Nakajima K, Kimura N, Nagashima R, Morikawa M;
 XX Okamoto K;
 XX WPI; 2002-508814/54.
 XX Detection of DNA polymorphism by mass spectroscopy for investigation and
 XX diagnosis of gene-related diseases.
 XX Example 3; Page 28; 34pp; Japanese.
 XX The present invention describes a method for detecting polymorphisms in
 XX DNA by: (a) preparing a DNA sample from patients containing the DNA
 XX region in which the target polymorphism is located; (b) hybridising to an
 XX appropriate oligonucleotide fragment, immobilised on a support; and (c)
 XX detecting the hybridised target DNA by mass spectroscopy. The method can
 XX be used for the investigation and diagnosis of gene-related diseases. The
 XX method allows polymorphisms to be detected rapidly and effectively in a
 XX large number of specimens. The present sequence represents an
 XX oligonucleotide which is used in an example from the present invention
 XX
 SQ Sequence 40 BP; 30 A; 0 C; 0 G; 10 T; 0 U; 0 Other;
 Query Match 1.2%; Score 33.2; DB 1; Length 40;
 Best Local Similarity 92.1%; Pred. No. 1.4e+02;
 Matches 35; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2701 TTTTACTAAAAA 2738
 |||||
 Db 3 TTTTAAAAA 40
 RESULT 52
 AAF29153/C
 ID AAF29153 standard; DNA; 33 BP.
 XX
 AC AAF29153;
 XX
 DT 04-APR-2001 (first entry)
 XX
 DE PCR primer SEQ ID 24 used to amplify SRSV specific cDNA.
 XX
 XX Small round structured virus; SRSV; food poisoning; PCR primer; ss.
 XX
 OS Small round structured virus.
 XX
 PN WO200079280-A1.
 XX
 PD 28-DEC-2000.
 XX
 XX 22-JUN-2000; 2000WO-JP004095.
 XX
 XX 22-JUN-1999; 99JP-00175928.
 XX
 XX (NINA-) JAPAN NAT INST INFECTIOUS DISEASES.
 XX (DENK-) DENKA SEIKEN KK.
 XX
 XX Takeda N, Natori K, Miyamura T, Kamata K, Sato T, Sato S;
 XX WPI; 2001-080848/09.
 XX
 XX Kit for the detection and typing of small round-structured virus (SRSV)
 XX strains for investigation of food poisoning outbreaks, contains
 XX

PT antibodies.
XX
XX Example 1; Page 75; 84pp; Japanese.
XX
CC This invention relates to a kit for the detection and typing of small
CC round structured virus (SRSV) strains. The kit contains antibodies
CC directed against peptides represented in sequences AAB49700 - AAB49710,
CC which are each SRSV strain specific. Polynucleotide sequences AAF20141 -
CC AAF20151 represent cDNA encoding the strain specific proteins. The kit is
CC used for detecting and typing strains of SRSV in order to prevent the
CC spread of infection and to examine the epidemiology of outbreaks. PCR
CC primers AAF29152 - AAF29163 are used to amplify SRSV strain specific cDNA
CC sequences
XX
SQ Sequence 33 BP; 0 A; 0 C; 0 G; 33 T; 0 U; 0 Other;

Query Match 1.2%; Score 33; DB 1; Length 33;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2741
Db 33 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 53
ADS19106/c
ID ADS19106 standard; DNA; 33 BP.
XX
AC ADS19106;
XX
DT 30-DEC-2004 (first entry)
XX
DE Multisignal labeling reagent associated oligonucleotide seqid 1.
XX
KW labeling molecule; solubility; multisignal labeling reagent; ss;
KW DNA-RNA hybrid.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_RNA 3
FT /*tag= a
FT /note= "Allylamine modified uridine"
FT misc_RNA 9
FT /*tag= b
FT /note= "Allylamine modified uridine"
FT misc_RNA 15
FT /*tag= c
FT /note= "Allylamine modified uridine"
FT misc_RNA 21
FT /*tag= d
FT /note= "Allylamine modified uridine"
FT misc_RNA 27
FT /*tag= e
FT /note= "Allylamine modified uridine"
FT misc_RNA 33
FT /*tag= f
FT /note= "Allylamine modified uridine"
XX
XX US2004198971-A1.
XX
XX 07-OCT-2004.
XX
XX 03-APR-2003; 2003US-00407818.
XX
XX 03-APR-2003; 2003US-00407818.
XX
XX (RABB/) RABBANI E.
XX (STAV/) STAVRIANOPOULOS J G.
XX (DONE/) DONEGAN J J.
XX Rabbani E, Stavrianopoulos JG, Donegan JJ;
PI

XX WPI; 2004-727850/71.
DR
XX Composition of multi signal labeling reagents, useful for detecting or
PT quantifying analyte in specimen, has oligomer/polymer having labeled
PT moieties, reactive groups and charged groups linked to oligomer/polymer.
XX
XX Example 1; SEQ ID NO 1; 20pp; English.
PS
CC The invention describes a composition (I) of matter comprising an
CC oligomer or polymer having two or more labeled groups, where the label or
CC labels are chemically linked to the oligomer or polymer, one or more
CC reactive groups, and one or more charged groups where the charged groups
CC are covalently linked to the oligomer or polymer or comprise part of the
CC backbone of the oligomer or polymer, or any of their combination. Also
CC described are: a composition (II) comprising a target molecule that has
CC been labeled using (I); and a composition (III) prepared by a target
CC labeling process comprising (i) providing a target for labeling, and a
CC labeling reagent having the formula (F1) or (F2), (ii) reacting the
CC target and the labeling reagent to form the composition having the
CC formula (F3) or (F4). (I) is useful for labeling a target molecule;
CC detecting or quantifying an analyte in a specimen; and detecting or
CC quantifying an analyte in a specimen. (II) or (III) is useful for
CC detecting or quantifying an analyte, which involves providing (II) or
CC (III), where the target is an analyte specific moiety, contacting the
CC (II) or (III) with a specimen suspected of containing the analyte, and
CC measuring the amount of (II) or (III) bound to analytes in the specimen
CC to detect or quantify the analyte. (I) detects or quantifies analyte with
CC high sensitivity. In (I), the multiple labeled groups increases the
CC amount of signal that is added to the analyte specific moiety, the
CC presence of reactive groups enables attachment of the multiple labeled
CC groups to a desirable target and the presence of charged group increases
CC solubility. This sequence represents a multisignal labeling reagent
CC associate oligonucleotide.
XX
SQ Sequence 33 BP; 0 A; 0 C; 0 G; 27 T; 6 U; 0 Other;

Query Match 1.2%; Score 33; DB 1; Length 33;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2741
Db 33 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 54
ABK99273
ID ABK99273 standard; RNA; 36 BP.
XX
AC ABK99273;
XX
DT 21-OCT-2002 (first entry)
XX
DE Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #3.
XX
KW Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
XX
OS Synthetic.
XX
XX US2002064771-A1.
XX
XX 30-MAY-2002.
XX
XX 06-APR-2001; 2001US-00828034.
XX
XX 07-APR-2000; 2000US-0195852P.
XX
XX (ZHON/) ZHONG W.
XX (HONG/) HONG Z.
XX (FERR/) FERRARI E.
XX
XX Zhong W, Hong Z, Ferrari E;
PI

XX WPI; 2002-582330/62.
 XX Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
 PT nucleotide-long template to which a 2 nucleotide-long primer is annealed,
 PT and template and primer which do not form a stable duplex in the absence
 PT of HCV NS5B.
 XX Example; Page 6; 17pp; English.

XX The invention relates to a replicase complex comprising a hepatitis C
 CC virus (HCV) NS5B replicase protein, a linear nucleic acid template and a
 CC complementary nucleic acid primer which is annealed to the 3' terminus of
 CC the template, where the template is at least three nucleotides and the
 CC primer is two or three nucleotides, and the template and primer do not
 CC form a stable duplex in solution in the absence of the HCV NS5B protein.
 CC The complex is useful for detecting HCV replicase activity and permits
 CC establishment of sensitive RNA-dependent RNA polymerase assays to screen
 CC and evaluate antiviral inhibitors and to improve the specificity and
 CC efficacy of the inhibitors. The complex is also useful in the development
 CC of a reliable system for determining kinetic and thermodynamic constants
 CC of HCV NS5B-catalysed nucleotide incorporation and investigation of
 CC mechanistic inhibitors for mis-incorporation or chain termination.
 CC Specifically, the short RNA template and primer pairs are useful in
 CC screening assays which are used for determining kinetic, thermodynamic
 CC and mechanistic properties of NS5B replicase and ultimately in the
 CC development of inhibitors of NS5B. Newly identified inhibitors of
 CC replicase activity may be used for developing anti-HCV pharmaceuticals.
 CC Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
 CC templates
 XX

SQ Sequence 36 BP; 33 A; 0 C; 2 G; 0 T; 1 U; 0 Other;

Query Match 1.2%; Score 33; DB 1; Length 36;
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;
 Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2741
 Db 3 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 55
 AAD27117
 ID AAD27117 standard; RNA; 36 BP.
 AC AAD27117;
 XX 09-APR-2002 (first entry)
 DE RNA template, AU used to direct RNA synthesis by HCV RNA polymerase.
 KW Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;
 KW lead compound; RNA polymerase; ss.
 OS Unidentified.
 XX US6322966-B1.
 XX 27-NOV-2001.
 XX 11-MAY-1999; 99US-00309670.
 XX 11-MAY-1999; 99US-00309670.
 XX (ZHON/) ZHONG W.
 XX (HONG/) HONG Z.
 XX (LAUJ/) LAU J Y N.

XX Zhong W, Hong Z, Lau JYN;
 PI WPI; 2002-096587/13.
 XX

PT Assay system for hepatitis C virus replicase activity comprises RNA
 PT template with unstable, small stemloop capable of forming copy-back
 PT structure, viral non-structural protein 5B, nucleoside triphosphates,
 XX buffer.
 XX Example 1; Fig 1A; 10pp; English.

XX The present invention relates to an assay system for hepatitis C virus
 CC (HCV) replicase activity. The assay system comprises an RNA template that
 CC has an unstable, small stemloop at the 3' end capable of forming a copy-
 CC back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP,
 CC and UTP nucleoside triphosphates (NTPs), where one of the NTP is
 CC radiolabelled and an assay buffer that supports replication activity of
 CC NS5B. The invention also relates to the identification of optimal
 CC properties of an RNA template for copy-back self-priming RNA synthesis of
 CC HCV. This activity can be used to screen for anti-HCV replicase compounds
 CC or to characterise the biological relevance of lead compounds. The
 CC optimal RNA templates can be used for developing a system to characterise
 CC HCV NS5B polymerase mechanistically and kinetically and for designing
 CC small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay
 CC system of the invention is useful for detecting HCV replicase activity.
 CC The nucleic acid synthesised by NS5B is detected by evaluating an
 CC autoradiograph of reaction products separated by gel electrophoresis. The
 CC present sequence is RNA template, AU used to direct RNA synthesis by RNA
 CC polymerase proteins of HCV, BVDV and poliovirus. This sequence is used in
 CC the exemplification of the invention
 XX

SQ Sequence 36 BP; 33 A; 0 C; 2 G; 0 T; 1 U; 0 Other;

Query Match 1.2%; Score 33; DB 1; Length 36;
 Best Local Similarity 100.0%; Pred. No. 1.3e+02;
 Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2741
 Db 3 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 35

RESULT 56
 AAD27125
 ID AAD27125 standard; RNA; 37 BP.
 XX AAD27125;
 AC AAD27125;
 XX 09-APR-2002 (first entry)
 DE RNA template, (AU)2 used to direct RNA synthesis by HCV RNA polymerase.
 KW Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;
 KW lead compound; RNA polymerase; ss.
 OS Unidentified.
 XX US6322966-B1.
 XX 27-NOV-2001.
 XX 11-MAY-1999; 99US-00309670.
 XX 11-MAY-1999; 99US-00309670.
 XX (ZHON/) ZHONG W.
 XX (HONG/) HONG Z.
 XX (LAUJ/) LAU J Y N.

XX Zhong W, Hong Z, Lau JYN;
 PI WPI; 2002-096587/13.
 XX

PT Assay system for hepatitis C virus replicase activity comprises RNA
 PT template with unstable, small stemloop capable of forming copy-back
 PT structure, viral non-structural protein 5B, nucleoside triphosphates,
 PT buffer.
 PT

XX PS Example 1; Fig 2A; 10pp; English.

XX CC The present invention relates to an assay system for hepatitis C virus (HCV) replicase activity. The assay system comprises an RNA template that has an unstable, small stem-loop at the 3' end capable of forming a copy-back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP, and UTP nucleoside triphosphates (NTPs), where one of the NTP is radiolabelled and an assay buffer that supports replication activity of NS5B. The invention also relates to the identification of optimal properties of an RNA template for copy-back self-priming RNA synthesis of HCV. This activity can be used to screen for anti-HCV replicase compounds or to characterise the biological relevance of lead compounds. The optimal RNA templates can be used for developing a system to characterise HCV NS5B polymerase mechanistically and kinetically and for designing small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay system of the invention is useful for detecting HCV replicase activity. The nucleic acid synthesised by NS5B is detected by evaluating an autoradiograph of reaction products separated by gel electrophoresis. The present sequence is RNA template, (AU)2 used to direct RNA synthesis by RNA polymerase proteins of HCV, BVDV and poliovirus. This sequence is used in the exemplification of the invention

XX CC Sequence 37 BP; 33 A; 0 C; 2 G; 0 T; 2 U; 0 Other;

Query Match 1.2%; Score 32.4; DB 1; Length 37;
 Best Local Similarity 97.1%; Pred. No. 1.5e+02;
 Matches 33; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
 |||||
 Db 3 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUA 36

RESULT 57
 AAN70278/c
 ID AAN70278 standard; DNA; 32 BP.
 XX CC AAN70278;
 AC
 XX CC 03-OCT-2002 (revised)
 DT 26-MAY-1991 (first entry)
 XX CC Sequence of scissile link probe MRC068 (HL).
 DE
 XX CC Hybridisation; probe; ss.
 KW
 XX CC Synthetic.
 OS
 XX CC EP227976-A.
 PN 08-JUL-1987.
 PD
 XX CC 04-DEC-1986; 86EP-00116906.
 PF
 XX CC 05-DEC-1985; 85US-00805279.
 PR (MEIO-) MEIOGENICS INC.
 PA
 XX CC Duck P, Bender R, Crosby W, Robertson JG;
 PI WPI; 1987-186567/27.
 DR

XX CC Synthetic nucleic acid probes - comprising two nucleic acid sequences linked by a scissile linkage.
 PT
 XX CC Example; p29; 46pp; English.

XX CC The patent claims a new molecule of formula (NA1----S----NA2)n. NA1 and NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile linkage; n = 1 or 1,000, which is used for the detection of specific DNA or RNA sequences in a test soln. The scissile link probes may be PL (Permanent Linkage to Solid Support) or HL (Hydrolysable Linkage to Solid

CC Support). The differential liability of DNA and RNA may be exploited in a heterogeneous system when the scissile linkage is an RNA molecule. In the examples, counter probe molecules 9 through 16 were used to determine suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing OS field.)

SQ Sequence 32 BP; 0 A; 0 C; 0 G; 24 T; 8 U; 0 Other;

Query Match 1.2%; Score 32; DB 1; Length 32;
 Best Local Similarity 100.0%; Pred. No. 1.4e+02;
 Matches 32; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
 |||||
 Db 32 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 58

AAN92244/c
 ID AAN92244 standard; DNA; 32 BP.
 XX CC AAN92244;
 AC
 XX CC 25-MAR-2003 (revised)
 DT 31-OCT-2002 (revised)
 DT 25-APR-1990 (first entry)
 XX CC SS probe MRC068.
 DE
 XX CC Probe MRC068; solid support; ribonuclease.
 KW
 XX CC Synthetic.

Key	Location/Qualifiers
FT misc_feature	1..14
FT	/tag= a
FT	/note= "deoxyribonucleotides."
FT misc_feature	15..22
FT	/tag= b
FT	/note= "ribonucleotides."
FT misc_feature	23..32
FT	/tag= c
FT	/note= "deoxyribonucleotides."

XX WO8910415-A.

XX 02-NOV-1989.

XX 29-APR-1988; 88US-00187814.

XX 29-APR-1988; 88US-00187814.

XX (MEIO-) MEIOGENICS INC.

XX Duck P, Bender R;

XX WPI; 1989-339977/46.

XX Detecting target nucleic acid molecules - using excess complementary nucleic acid probes and nicking to complete a cycling sequence.

XX Disclosure; Page 24; 34pp; English.

XX CC Probe MRC068 is bound by a hydrolysable linkage to a solid support at its 3' end. It is used by reacting excess probe with a target nucleic acid; nicking hybridised probe at least once within a predetermined sequence to form 2 or more probe fragments hybridised to the target sequence, which results in the probe fragments becoming hybridised to another probe; and identifying probe fragments, so detecting the target sequence. The probe can react with target sequence to complete a cycling sequence. Using this system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can be obt'd. The probe is cleavable at the ribonucleotides by a ds RNase, eg RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)

```

CC (Updated on 25-MAR-2003 to correct PR field.)
XX
SQ Sequence 32 BP; 0 A; 0 C; 0 G; 24 T; 8 U; 0 Other;

Query Match      1.2%; Score 32; DB 1; Length 32;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 32; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
Db 32 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 59
ADC3445/c
ID ADC3445 standard; DNA; 32 BP.
XX
AC ADC3445;
XX
DT 18-DEC-2003 (first entry)
XX
DE Template oligonucleotide #SEQ ID 2.
XX
KW Binding; tandem repeat; label; analyte detection; ss.
XX
OS Synthetic.
XX
PN WO2003072721-A2.
XX
PD 04-SEP-2003.
XX
PF 20-FEB-2003; 2003WO-US005301.
XX
PR 21-FEB-2002; 2002US-0359223P.
XX
PR 08-MAY-2002; 2002US-0379360P.
XX
PA (DISC-) DISCOVERX INC.
XX
PI Wu M, Ullman E;
XX
DR WPI; 2003-712717/67.
XX
PT Detecting a label comprising employing (as the label) a reagent having a
PT 3' extendable terminus hybridized to a tandem repeat template in
PT combination with a DNA polymerase and dNTPs necessary for repetitively
PT replicating the tandem repeat.
XX
PS Example; SEQ ID NO 2; 38pp; English.
XX
CC The invention relates to a method for detecting a label, comprising
CC employing (as the label) a reagent having a 3' extendable terminus
CC hybridised to a tandem repeat template in combination with a DNA
CC polymerase and dNTPs necessary for repetitively replicating the tandem
CC repeat. The method involves detecting a binding event between first and
CC second binding members, employing a label to determine the occurrence of
CC the binding event. The tandem repeating units are polyr. The method of
CC the invention is useful in detecting an analyte using repetitive
CC extension along a tandem repeat. The extended nucleic acid may be used
CC for detecting a moiety, particularly involved in a binding event
CC employing a reagent. The current sequence represents a template member
CC oligonucleotide containing a polyr tandem repeat that binds to the
CC extendable oligonucleotide given in ADC3444.
XX
SQ Sequence 32 BP; 0 A; 0 C; 0 G; 32 T; 0 U; 0 Other;

Query Match      1.2%; Score 32; DB 1; Length 32;
Best Local Similarity 100.0%; Pred. No. 1.4e+02;
Matches 32; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
Db 32 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

nucleotide; circular oligonucleotide;
rolling circle synthesis; diagnosis; therapeutic agent; ss.
Synthetic.

```

```

RESULT 60
AAZ98722/c
ID AAZ98722 standard; cDNA; 40 BP.
XX
AC AAZ98722;
XX
DT 20-JUN-2000 (first entry)
XX
DE PCR primer used for swine vesicular disease virus gene synthesis.
XX
KW Swine vesicular disease virus; SVDV; swine vesicular disease;
KW Taiwan Yu-Li strain; foot and mouth disease; coxsackie virus;
KW differentiation; vaccine; prevent; PCR primer; ss.
XX
OS Swine vesicular disease virus.
XX
PN EP982403-A1.
XX
PD 01-MAR-2000.
XX
PF 14-AUG-1998; 98EP-00306486.
XX
PR 14-AUG-1998; 98EP-00306486.
XX
PA (BIOT-) DEV CENT BIOTECHNOLOGY.
XX
PI Hwang CL, Lo C, Yang Y, Jeng K, Chang EL;
XX
DR WPI; 2000-258616/23.
XX
PT Mutant strains of swine vesicular disease virus (SVDV) used in vaccines
PT to prevent swine vesicular disease.
XX
PS Example 2; Page 6; 66pp; English.
XX
CC This sequence represents a PCR primer used to determine the full length
CC cDNA sequence of the swine vesicular disease virus (SVDV) gene sequence
CC of Taiwan Yu-Li strain (see AAZ98717). SVDV is the causative agent of
CC swine vesicular disease, which is very similar to foot and mouth disease.
CC The invention relates to the wild-type Taiwan Yu-Li strain cDNA sequence,
CC and the gene sequences of the mutant SVDV strains N3, H21 and SP7. The
CC mutant SVDV nucleotide sequence can be used in a vaccine for the
CC prophylaxis of swine vesicular disease. The invention also includes a
CC method for differentiating the mutant SVDV nucleotide sequences from the
CC wild type strain of SVDV, coxsackievirus and foot-and-mouth disease virus
CC through the use of polymerase chain reaction
XX
SQ Sequence 40 BP; 1 A; 3 C; 3 G; 33 T; 0 U; 0 Other;

Query Match      1.2%; Score 32; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 32; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
Db 40 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 9

RESULT 61
AAV12483/c
ID AAV12483 standard; DNA; 39 BP.
XX
AC AAV12483;
XX
DT 15-MAY-1998 (first entry)
XX
DE Oligonucleotide SEQ ID NO:6 from US5174320 Example 2.
XX
KW Synthesis; selection; amplification; circular oligonucleotide;
KW rolling circle synthesis; diagnosis; therapeutic agent; ss.
XX
OS Synthetic.

```

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XX PN US5714320-A.
XX XX
XX PD 03-FEB-1998.
XX XX
XX PF 23-FEB-1995; 95US-00393439.
XX XX
XX PR 15-APR-1993; 93US-00047860.
XX XX
XX PA (UYRP ) UNIV ROCHESTER.
XX XX
XX PI Kool ET;
XX XX
XX DR WPI; 1998-144278/13.
XX XX
XX PT Rolling circle synthesis of oligo:nucleotide(s) - using primed circular
XX PT template to produce oligonucleotide multimer for cleavage.
XX XX
XX PS Example 2; Col 45; 38pp; English.
XX XX
XX CC The present sequence represents an oligonucleotide used in an example of
XX CC the present invention. The present invention describes a method for
XX CC synthesising a selected oligonucleotide (I) having well defined ends. The
XX CC method comprises: (a) annealing a primer to a single-stranded (ss)
XX CC circular template to yield a primed circular template, where the template
XX CC comprises: (i) at least one nucleotide sequence complementary to (I); and
XX CC (ii) at least one nucleotide effective to produce a cleavage site in the
XX CC oligonucleotide multimer; (b) combining the primed circular template with
XX CC at least two types of nucleotide triphosphates and a polymerase enzyme
XX CC without the addition of auxiliary proteins to yield a ss oligonucleotide
XX CC multimer complementary to the circular oligonucleotide template.
XX CC comprising multiple copies of (I); and (c) cleaving the oligonucleotide
XX CC multimer at the cleavage site to produce (I) having well defined ends.
XX CC The method is used for the large-scale synthesis of DNA and RNA oligomers
XX CC for use, e.g. as probes and diagnostic agents and/or therapeutic agents
XX XX
XX SQ Sequence 39 BP; 0 A; 0 C; 3 G; 36 T; 0 U; 0 Other;

Query Match 1.2%; Score 31.8; DB 1; Length 39;
Best Local Similarity 94.3%; Pred. NO. 1.7e+02;
Matches 33; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 39 AAAAAAAAAACACAAAAAAAAAAAAAAAAACAAAAAAAAA 5

RESULT 62
AA330019/C
ID AAX30019 standard; DNA; 39 BP.
XX AC
XX AC AAX30019;
XX XX
XX DT 16-JUN-1999 (first entry)
XX XX
XX DE Multimer SEQ ID NO:6.
XX XX
XX KW Multimer; probe; diagnosis; synthesis; detection; polymerase; ss.
XX XX
XX OS Synthetic.
XX XX
XX PN WO9909216-A2.
XX XX
XX PD 25-FEB-1999.
XX XX
XX PF 13-AUG-1998; 98WO-US016776.
XX XX
XX PR 13-AUG-1997; 97US-00910632.
XX XX
XX PA (UYRP ) UNIV ROCHESTER.
XX XX
XX PI Kool ET;
XX XX

```

```

DR WPI; 1999-181062/15.
XX XX
XX PT New detectably labelled oligonucleotide multimer, comprising multiple
XX PT contiguous copies of a repeated oligonucleotide - useful for detecting
XX PT target molecules in diagnosis and medicinal applications.
XX XX
XX PS Example 2; Page 41; 103pp; English.
XX XX
XX CC The present invention describes a detectably labelled oligonucleotide
XX CC multimer, comprising multiple contiguous copies of a repeated
XX CC oligonucleotide. The detectably labelled oligonucleotide multimer is
XX CC useful for detecting a target molecule. Oligonucleotide multimers may be
XX CC produced in sufficient quantity to be useful for diagnostic and medical
XX CC applications. The multimers are useful for affinity labelling of
XX CC proteins, and for signal amplification in highly sensitive affinity
XX CC capture and sequence identification applications. The method provides a
XX CC faster, cheaper and simpler way for large-scale production of DNA and RNA
XX CC oligomers and multimers. The incorporation of labels enables the
XX CC oligonucleotide multimers to be useful in diagnostics and medicine. The
XX CC present sequence represents an oligonucleotide used in an example from
XX CC the present invention
XX XX
XX SQ Sequence 39 BP; 0 A; 0 C; 3 G; 36 T; 0 U; 0 Other;

Query Match 1.2%; Score 31.8; DB 1; Length 39;
Best Local Similarity 94.3%; Pred. NO. 1.7e+02;
Matches 33; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
Db 39 AAAAAAAAAACACAAAAAAAAAAAAAAAAACAAAAAAAAA 5

RESULT 63
ADI32816
ID ADI32816 standard; RNA; 39 BP.
XX AC
XX AC ADI32816;
XX XX
XX DT 22-APR-2004 (first entry)
XX XX
XX DE 3' flanking RNA of IT ribozyme (Rz) from CHOP portion of SNIPAA cassette.
XX XX
XX KW HPV infection; replication; cytostatic; virucide; cervical dysplasia;
XX KW carcinoma; oral mucosal cancer; laryngeal; vaccine; gene therapy;
XX KW double internal trans-acting ribozyme; single; dITRz; ITRz; CHOP portion;
XX KW SNIPAA cassette; ss.
XX XX
XX OS Unidentified.
XX XX
XX PN WO2004002416-A2.
XX XX
XX PD 08-JAN-2004.
XX XX
XX PF 26-JUN-2003; 2003WO-US020340.
XX XX
XX PR 26-JUN-2002; 2002US-0391795P.
XX PR 14-OCT-2002; 2002US-0417997P.
XX PR 21-FEB-2003; 2003US-0449066P.
XX XX
XX PA (PENN-) PENN STATE RES FOUND.
XX XX
XX PI Clawson GA, Pan W, Christensen N, Thiboutot D;
XX XX
XX DR WPI; 2004-082869/08.
XX XX
XX PT Treating human papilloma virus (HPV) infection, e.g. cervical dysplasias
XX PT or HPV-associated cervical carcinoma, comprises administering to a
XX PT patient a nucleic acid molecule that inhibits expression associated with
XX PT HPV replication.
XX XX
XX PS Example 2; SEQ ID NO 56; 65pp; English.
XX XX

```

CC The invention relates to a novel method for treating Human papillomavirus
 CC (HPV) infection comprising administering to a patient a nucleic acid
 CC molecule that inhibits expression associated with HPV replications. The
 CC method of the invention has cytostatic and virucide applications and may
 CC be useful for treating HPV infections or HPV-associated conditions
 CC including cervical dysplasia, cervical carcinoma, oral mucosal cancer and
 CC laryngeal cancer. Furthermore, the method may be utilised during vaccine
 CC production and gene therapy. The current sequence is that of the HPV-
 CC targeted ribozyme (Rz)-related RNA of the invention.

XX Sequence 39 BP; 32 A; 2 C; 2 G; 0 T; 3 U; 0 Other;
 SQ Query Match 1.1%; Score 31.2; DB 1; Length 39;
 CC Best Local Similarity 88.9%; Pred. No. 1.8e+02;
 XX Matches 32; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 2704 GTACTAAAAA 2739
 DB 1 GAAUUCAAAAA 36

RESULT 64
 AAI30705
 ID AAI30705 standard; DNA; 31 BP.
 XX AAI30705;
 AC
 XX 04-NOV-2004 (revised)
 DT 18-OCT-2001 (first entry)
 XX Human single nucleotide polymorphism (SNP) G22P1.
 DE
 XX Human; resequence; genotype; disease; forensic; paternity testing;
 XX single nucleotide polymorphism; SNP; ss.
 KW
 XX Homo sapiens.

XX Key Location/Qualifiers
 FH variation 16
 FT /*tag= a
 FT /standard_name= "single nucleotide polymorphism"
 XX WO200166800-A2.
 XX 13-SEP-2001.
 XX 07-MAR-2001; 2001WO-US007268.
 XX 07-MAR-2000; 2000US-0187510P.
 PR 22-MAY-2000; 2000US-0206129P.
 XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA Cargill M, Ireland JS, Lander ES;
 PI
 XX WPI; 2001-522952/57.
 DR

XX Nucleic acid molecules from the human genome which include polymorphic
 PT sites, useful in methods for predicting the presence, absence or severity
 PT of a particular phenotype or disorder (e.g. diabetes) associated with a
 PT particular genotype.

XX Claim 1; Page 102; 145pp; English.
 XX The invention relates to the identification of nucleic acid molecules
 CC (AAI29513-AAI31314) from the human genome which include polymorphic sites
 CC which can predispose individuals to disease. Various genes from a number
 CC of individuals were resequenced and single nucleotide polymorphisms
 CC (SNPs) in these genes discovered. The method is useful for predicting the
 CC presence, absence or severity of a particular phenotype or disorder (e.g.
 CC diabetes) associated with a particular genotype. The nucleic acids
 CC containing the polymorphic sites may be useful in forensics and paternity
 CC testing

CC Revised record issued on 04-NOV-2004 : Correction to Feature Table Key
 XX Sequence 31 BP; 11 A; 5 C; 7 G; 8 T; 0 U; 0 Other;
 SQ Query Match 1.1%; Score 31; DB 1; Length 31;
 CC Best Local Similarity 100.0%; Pred. No. 1.6e+02;
 XX Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 870 TCAGTAAGATCATAAGCAGTCGATCGAGATCT 900
 DB 1 TCAGTAAGATCATAAGCAGTCGATCGAGATCT 31

RESULT 65
 AEE86835/c
 ID AEE86835 standard; DNA; 31 BP.
 XX AEE86835;
 AC
 XX 23-FEB-2006 (first entry)
 DT
 XX Novel solid phase-related oligonucleotide Oligo-dT31-Si (O-Me)3 #10.
 DE
 XX DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
 XX Synthetic.

XX Key Location/Qualifiers
 FH modified_base 31 /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 3'-terminal Si (O-Me)3"
 XX DE102004025746-A1.
 XX 15-DEC-2005.
 XX 26-MAY-2004; 2004DE-10025746.
 XX 26-MAY-2004; 2004DE-10025746.

XX (CHER/) CHERKASOV D.
 PA (HENN/) HENNIG C.
 PA (GENO-) GENOVXX GMBH.
 XX Cherkasov D, Hennig C, Baeuml E;
 XX WPI; 2006-040183/05.
 DR

XX Parallel sequencing of nucleic acids by optical methods, by cyclic primer
 PT -matrix extension, using a solid phase with reduced non-specific binding
 PT of labeled components.

XX Disclosure; Page 97; 144pp; German.

XX This invention relates to a novel method for parallel sequence analysis
 CC of nucleic acids (NA) by optical means using a novel solid phase (SP).
 CC The SP is useful for multiple parallel sequencing of nucleic acids and
 CC shows reduced non-specific binding of labeled or unlabeled nucleotides
 CC and nucleic acids, so the background remains low even after prolonged and
 CC repeated contact of the solid phase with high concentrations of labeled
 CC reagents. The present sequence is that of an oligonucleotide which was
 CC used in the development of the novel method of the invention.

XX Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;

XX Query Match 1.1%; Score 31; DB 1; Length 31;
 CC Best Local Similarity 100.0%; Pred. No. 1.6e+02;
 XX Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
 |||||

```

Db      31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 66
AEE86830/c
ID AEE86830 standard; DNA; 31 BP.
XX
XX
AC AEE86830;
XX
XX
DT 23-FEB-2006 (first entry)
XX
XX
DE Novel solid phase-related oligonucleotide Oligo-dT31-NH2 #5.
XX
XX DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 31 /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 3'-terminal amide"
XX
XX DE102004025746-A1.
XX
XX 15-DEC-2005.
XX
XX 26-MAY-2004; 2004DE-10025746.
XX
XX 26-MAY-2004; 2004DE-10025746.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVXX GMBH.
XX
XX Cherkasov D, Hennig C, Baeuml E;
XX WPI; 2006-040183/05.
XX
XX Parallel sequencing of nucleic acids by optical methods, by cyclic primer
XX -matrix extension, using a solid phase with reduced non-specific binding
XX of labeled components.
XX
XX Disclosure; Page 97; 144pp; German.
XX
XX This invention relates to a novel method for parallel sequence analysis
XX of nucleic acids (NA) by optical means using a novel solid phase (SP).
XX The SP is useful for multiple parallel sequencing of nucleic acids and
XX shows reduced non-specific binding of labeled or unlabeled nucleotides
XX and nucleic acids, so the background remains low even after prolonged and
XX repeated contact of the solid phase with high concentrations of labeled
XX reagents. The present sequence is that of an oligonucleotide which was
XX used in the development of the novel method of the invention.
XX
XX Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 31; DB 1; Length 31;
XX Best Local Similarity 100.0%; Pred. No. 1.6e+02;
XX Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
Db      31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 67
AEE86829/c
ID AEE86829 standard; DNA; 31 BP.
XX
XX
AC AEE86829;
XX
XX
DT 23-FEB-2006 (first entry)
XX
XX
DE Novel solid phase-related oligonucleotide Oligo-dT31-NH2 #4.
XX
XX DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers

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```

DE Novel solid phase-related oligonucleotide Cy3-Oligo-dT31-NH2 #4.
XX
XX DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1 /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= Cy3"
XX
XX modified_base 31 /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= 3'-terminal amide"
XX
XX DE102004025746-A1.
XX
XX 15-DEC-2005.
XX
XX 26-MAY-2004; 2004DE-10025746.
XX
XX 26-MAY-2004; 2004DE-10025746.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVXX GMBH.
XX
XX Cherkasov D, Hennig C, Baeuml E;
XX WPI; 2006-040183/05.
XX
XX Parallel sequencing of nucleic acids by optical methods, by cyclic primer
XX -matrix extension, using a solid phase with reduced non-specific binding
XX of labeled components.
XX
XX Disclosure; Page 97; 144pp; German.
XX
XX This invention relates to a novel method for parallel sequence analysis
XX of nucleic acids (NA) by optical means using a novel solid phase (SP).
XX The SP is useful for multiple parallel sequencing of nucleic acids and
XX shows reduced non-specific binding of labeled or unlabeled nucleotides
XX and nucleic acids, so the background remains low even after prolonged and
XX repeated contact of the solid phase with high concentrations of labeled
XX reagents. The present sequence is that of an oligonucleotide which was
XX used in the development of the novel method of the invention.
XX
XX Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 31; DB 1; Length 31;
XX Best Local Similarity 100.0%; Pred. No. 1.6e+02;
XX Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
Db      31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 68
AEE86846/c
ID AEE86846 standard; DNA; 31 BP.
XX
XX
AC AEE86846;
XX
XX
DT 23-FEB-2006 (first entry)
XX
XX
DE Novel solid phase-related oligonucleotide Oligo-dT31-NH2 #4.
XX
XX DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers

```



```

FT modified_base 31 /*tag= a
FT (GENO-) GENOV0XX GMBH.
FT (CHER/) CHERKASOV D.
XX /*note= "OTHER= 3'-terminal amide"
XX
XX DE102004025745-A1.
XX
XX 15-DEC-2005.
XX
XX 26-MAY-2004; 2004DE-10025745.
XX
XX 26-MAY-2004; 2004DE-10025745.
XX
XX (HENN/) HENNIG C.
XX (GENO-) GENOV0XX GMBH.
XX (CHER/) CHERKASOV D.
XX
XX Cherkasov D, Hennig C;
XX WPI; 2006-040182/05.
XX
XX Surface of solid phase, useful for parallel, optical analysis of many
XX nucleic acids, has reduced non-specific binding of labeled components.
XX
XX Disclosure; Page 62; 88pp; German.
XX
XX This invention relates to a novel surface of a solid phase (SP), useful
XX in methods for parallel analysis of many individual nucleic acids (NA) by
XX optical methods. The novel SP is useful for multiple parallel sequencing
XX of nucleic acids and shows reduced non-specific binding of labeled or
XX unlabeled nucleotides and nucleic acids. The present sequence is that of
XX an oligonucleotide which was used in the development of the novel solid
XX phase of the invention.
XX
XX Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 31; DB 1; Length 31;
XX Best Local Similarity 100.0%; Pred. No. 1.6e+02;
XX Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
XX |||||||
XX Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 69
XX AEE86851/c
XX ID AEE86851 standard; DNA; 31 BP.
XX
XX AC AEE86851;
XX
XX DT 23-FEB-2006 (first entry)
XX
XX DE Novel solid phase-related oligonucleotide Oligo-dT31-Si (O-Me) 3 #9.
XX
XX KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX modified_base 31 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 3'-terminal Si(O-Me) 3"
XX
XX PN DE102004025745-A1.
XX
XX PD 15-DEC-2005.
XX
XX PF 26-MAY-2004; 2004DE-10025745.
XX
XX PR 26-MAY-2004; 2004DE-10025745.
XX
XX (HENN/) HENNIG C.
XX (GENO-) GENOV0XX GMBH.
XX (CHER/) CHERKASOV D.
XX
XX Cherkasov D, Hennig C;
XX WPI; 2006-040182/05.
XX
XX Surface of solid phase, useful for parallel, optical analysis of many

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PA (HENN/) HENNIG C.
PA (GENO-) GENOV0XX GMBH.
PA (CHER/) CHERKASOV D.
XX
XX Cherkasov D, Hennig C;
XX WPI; 2006-040182/05.
XX
XX Surface of solid phase, useful for parallel, optical analysis of many
XX nucleic acids, has reduced non-specific binding of labeled components.
XX
XX Disclosure; Page 62; 88pp; German.
XX
XX This invention relates to a novel surface of a solid phase (SP), useful
XX in methods for parallel analysis of many individual nucleic acids (NA) by
XX optical methods. The novel SP is useful for multiple parallel sequencing
XX of nucleic acids and shows reduced non-specific binding of labeled or
XX unlabeled nucleotides and nucleic acids. The present sequence is that of
XX an oligonucleotide which was used in the development of the novel solid
XX phase of the invention.
XX
XX Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 31; DB 1; Length 31;
XX Best Local Similarity 100.0%; Pred. No. 1.6e+02;
XX Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
XX |||||||
XX Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 70
XX AEE86845/c
XX ID AEE86845 standard; DNA; 31 BP.
XX
XX AC AEE86845;
XX
XX DT 23-FEB-2006 (first entry)
XX
XX DE Novel solid phase-related oligonucleotide Cy3-Oligo-dT31-NH2 #3.
XX
XX KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Cy3"
XX
XX modified_base 31 /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "OTHER= 3'-terminal amide"
XX
XX PN DE102004025745-A1.
XX
XX PD 15-DEC-2005.
XX
XX PF 26-MAY-2004; 2004DE-10025745.
XX
XX PR 26-MAY-2004; 2004DE-10025745.
XX
XX (HENN/) HENNIG C.
XX (GENO-) GENOV0XX GMBH.
XX (CHER/) CHERKASOV D.
XX
XX Cherkasov D, Hennig C;
XX WPI; 2006-040182/05.
XX
XX Surface of solid phase, useful for parallel, optical analysis of many

```

PT nucleic acids, has reduced non-specific binding of labeled components.
 XX
 PS Disclosure; Page 62; 88pp; German.
 XX
 CC This invention relates to a novel surface of a solid phase (SP), useful
 CC in methods for parallel analysis of many individual nucleic acids (NA) by
 CC optical methods. The novel SP is useful for multiple parallel sequencing
 CC of nucleic acids and shows reduced non-specific binding of labeled or
 CC unlabeled nucleotides and nucleic acids. The present sequence is that of
 CC an oligonucleotide which was used in the development of the novel solid
 CC phase of the invention.
 XX
 SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
 Query Match 1.1%; Score 31; DB 1; Length 31;
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;
 Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
 DB 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 71
 AEF12155/c
 ID AEF12155 standard; DNA; 31 BP.
 XX AC AEF12155;
 XX 09-MAR-2006 (first entry)
 DT
 DE Oligonucleotide Cy3-Oligo-dT31-NH2.
 KW DNA detection; DNA sequencing; primer; ss.
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 FH modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "optionally labeled with Cy3"
 FT modified_base 31 /*tag= b
 FT /mod_base= OTHER
 FT /note= "optionally labeled with an amide group or Si(O-
 FT Me)3"
 XX
 PN DE102004025744-A1.
 XX
 XX 29-DEC-2005.
 XX
 XX 26-MAY-2004; 2004DE-10025744.
 XX
 XX 26-MAY-2004; 2004DE-10025744.
 XX
 XX (CHER/) CHERKASOV D.
 XX (HENN/) HENNIG C.
 XX (GENO-) GENOVXX GMBH.
 XX
 XX Cherkasov D, Hennig C;
 FI WPI; 2006-081126/09.
 DR
 XX Surface of a solid support, useful for multiple parallel analysis of
 XX nucleic acids by optical methods, having low non-specific binding of
 PT labeled components.
 PT
 XX Disclosure; Page 62; 88pp; German.
 XX
 CC This invention describes a novel solid support surface for parallel
 CC analysis of many individual nucleic acids by optical methods. The
 CC invention also describes; a) a solid phase in which the surface shows

CC reduced non-specific binding of labeled components; b) methods for
 CC preparing the novel solid support and c) methods of parallel analysis of
 CC many nucleic acid by optical methods, using the solid support. The
 CC surface of the solid support is made of silica, glass, silicon dioxide or
 CC Si-OH; is flat and has nucleic acid chains fixed to it, optionally
 CC through a linker. The solid phase is preferably part of a device that
 CC allows fluid exchange and it is permeable to light in the wavelength
 CC regions 200-400; 200-2000 or 400-800 nm. An external layer of solid
 CC support is removed, then the nucleic acid is coupled to it, optionally
 CC after attachment of a linker layer. Alternatively, after removing the
 CC external layer, nucleic acids are synthesized on the surface by cyclic
 CC coupling, optionally after attachment of a linker, and in either case,
 CC additional substances (specifically phosphate, sulfate or carboxy-
 CC containing monomers or polymers) can be coupled to the surface, after
 CC attachment or synthesis of nucleic acids. Only part of the surface is
 CC removed, particularly by a chemical reaction with hydrofluoric acid or
 CC sodium hydroxide, especially to remove a layer 1 nm to 100 micron thick.
 CC Particularly after removal of the surface layer, the surface is not dried
 CC and all subsequent steps are done in a liquid phase. The nucleic acids
 CC analyzed represent a single population or many different populations and
 CC contains 5-50, 20-200 or 50-500 nucleotides. The linker is 1-50 nm long
 CC and is e.g. a branched or linear polymer; (strept)avidin or a nucleic
 CC acid. Parallel analysis uses components labeled with ribo-, deoxyribo- or
 CC dideoxyribo-nucleoside triphosphates, in which the label is cleavable.
 CC Particularly analysis involves cyclic sequencing and a preferred method
 CC comprises: binding nucleic acid to the solid support, with formation of a
 CC extensible primer-matrix complex; performing cyclic reactions and
 CC reconstructing the nucleic acid sequence. The sequences being analyzed
 CC contain 30-3000 nt, RNA or DNA, and the solid phase may carry nucleic
 CC acid sequences that function as primers for the sequencing reaction;
 CC alternatively the nucleic acid is fixed to the support and then
 CC hybridized with a primer. The incorporated nucleotide includes a
 CC reversible terminating group so that only one nucleotide can be
 CC incorporated in each step. The surface is specifically used for multiple
 CC parallel sequencing of nucleic acids. The surface shows reduced non-
 CC specific binding of labeled and unlabeled nucleotides or nucleic acids,
 CC so assay sensitivity is improved. This sequence represents an
 CC oligonucleotide used to illustrate the method of the invention.
 XX
 SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
 Query Match 1.1%; Score 31; DB 1; Length 31;
 Best Local Similarity 100.0%; Pred. No. 1.6e+02;
 Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
 DB 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 72
 AEF94772/c
 ID AEF94772 standard; DNA; 31 BP.
 XX AC AEF94772;
 XX 20-APR-2006 (first entry)
 DT
 XX Optical DNA analysis process-related oligonucleotide Cy3-dt31-NH2.
 DE ss; dna detection; DNA sequencing; DNA amplification; oligo Cy3-dt31-
 XX Unidentified.
 OS Synthetic.
 XX Key Location/Qualifiers
 FH modified_base 1 /*tag= b
 FT /mod_base= 5'-Cy3
 FT modified_base 31 /*tag= b
 FT /mod_base= 3'-NH2
 FT
 XX


```

DR WPI; 2006-185819/20.
XX
PT Optical fluorescent parallel process to analyse nucleic acid chains in
PT which a sample solid is bound with a primer-matrix complex.
XX
PS Example 5; Page 66; 94pp; German.
XX
CC This invention relates to a novel optical fluorescent process to analyse
CC nucleic acid chains. Using the method, a sample solid is bound with a
CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
CC are incorporated in the primer matrix by enzyme reaction, followed by
CC washing of the solid phase. The marked nucleotides are detected and their
CC co-ordinates logged and the signals removed. The marked nucleotides are
CC detected and their co-ordinates logged and the signals removed. The solid
CC phase is then washed and the sequence repeated as necessary. The Nucleic
CC acid chain sequence is then reconstructed using the signals. The process
CC is faster, more efficient and cheaper than prior art. Further claimed is
CC that the process is able to determine many sequences in parallel. The
CC present sequence is that of oligonucleotide dT31-Si(O which was used in
CC the development of the novel process of the invention.
XX
SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
Query Match 1.1%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 75
AEF94756/c
ID AEF94756 standard; DNA; 31 BP.
XX
AC AEF94756;
XX
DT 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide Cy3-dt31-NH2.
XX
KW ss; dna detection; DNA sequencing; DNA amplification; oligo Cy3-dt31-.
XX
OS Unidentified.
XX OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= b
FT /mod_base= 5'-Cy3
FT modified_base 31
FT /*tag= b
FT /mod_base= 3'-NH2
XX
PN DE102004025694-A1.
XX
PD 23-FEB-2006.
XX
PF 26-MAY-2004; 2004DE-10025694.
XX
PR 26-MAY-2004; 2004DE-10025694.
XX
PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX
PI Cherkasov D, Hennig C;
XX
DR WPI; 2006-185818/20.
XX
CC Optical fluorescent ultra-high parallel process to analyse nucleic acid
CC chains in which a sample solid is bound with a primer-matrix complex.

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XX Example 5; Page 67; 95pp; German.
XX
CC This invention relates to a novel optical fluorescent process to analyse
CC nucleic acid chains. Using the method, a sample solid is bound with a
CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
CC are incorporated in the primer matrix by enzyme reaction, followed by
CC washing of the solid phase. The marked nucleotides are detected and their
CC co-ordinates logged and the signals removed. The marked nucleotides are
CC detected and their co-ordinates logged and the signals removed. The solid
CC phase is then washed and the sequence repeated as necessary. The Nucleic
CC acid chain sequence is then reconstructed using the signals. The process
CC is faster, more efficient and cheaper than prior art. The present
CC sequence is that of oligonucleotide Cy3-dt31- which was used in the
CC development of the novel process of the invention.
XX
SQ Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
Query Match 1.1%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 76
AEF94757/c
ID AEF94757 standard; DNA; 31 BP.
XX
AC AEF94757;
XX
DT 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide dt31-NH2.
XX
KW ss; dna detection; DNA sequencing; DNA amplification; oligo dt31-NH2.
XX
OS Unidentified.
XX OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 31 /*tag= b
FT /mod_base= 3'-NH2
XX
PN DE102004025694-A1.
XX
PD 23-FEB-2006.
XX
PF 26-MAY-2004; 2004DE-10025694.
XX
PR 26-MAY-2004; 2004DE-10025694.
XX
PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX
PI Cherkasov D, Hennig C;
XX
DR WPI; 2006-185818/20.
XX
CC Optical fluorescent ultra-high parallel process to analyse nucleic acid
CC chains in which a sample solid is bound with a primer-matrix complex.
XX
PS Example 5; Page 67; 95pp; German.
XX
CC This invention relates to a novel optical fluorescent process to analyse
CC nucleic acid chains. Using the method, a sample solid is bound with a
CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
CC are incorporated in the primer matrix by enzyme reaction, followed by
CC washing of the solid phase. The marked nucleotides are detected and their

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```
Db      31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 79
AEF94723/c
ID AEF94723 standard; DNA; 31 BP.
XX
XX
AC AEF94723;
XX
DT 20-APR-2006 (first entry)
DE Optical DNA analysis process-related oligonucleotide dT31-Si (O-Me)3.
KW ss; dna detection; DNA sequencing; DNA amplification; oligo dT31-Si (O.
XX Unidentified.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 31 /*tag= b
FT /*mod_base= 3'-Si (O-Me)3
FT
XX DE102004025696-A1.
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVOXX GMBH.
XX
XX Cherkasov D, Hennig C, Baeuml E;
XX WPI; 2006-185820/20.
XX
XX Ultra-high parallel analysis process to analyse nucleic acid chains in
XX which a sample solid is bound and substrate material.
XX
XX Example 5; Page 95; 141pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. Further claimed is
XX that the process is able to determine many sequences in parallel. The
XX present sequence is that of oligonucleotide dT31-Si(O which was used in
XX the development of the novel process of the invention.
XX
XX Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 80
AEF94717/c
ID AEF94717 standard; DNA; 31 BP.
XX
XX
AC AEF94717;
XX
DT 20-APR-2006 (first entry)
DE Optical DNA analysis process-related oligonucleotide Cy3-dt31-NH2.
KW ss; dna detection; DNA sequencing; DNA amplification; oligo Cy3-dt31-.
XX Unidentified.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= b
FT /*mod_base= 5'-Cy3
FT modified_base 31 /*tag= b
FT /*mod_base= 3'-NH2
XX DE102004025696-A1.
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVOXX GMBH.
XX
XX Cherkasov D, Hennig C, Baeuml E;
XX WPI; 2006-185820/20.
XX
XX Ultra-high parallel analysis process to analyse nucleic acid chains in
XX which a sample solid is bound and substrate material.
XX
XX Example 5; Page 95; 141pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. Further claimed is
XX that the process is able to determine many sequences in parallel. The
XX present sequence is that of oligonucleotide Cy3-dt31- which was used in
XX the development of the novel process of the invention.
XX
XX Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 81
ADU05084
ID ADU05084 standard; DNA; 33 BP.
XX
XX ADU05084;
XX
DT 27-JAN-2005 (first entry)
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XX AEF94717;
XX
XX 20-APR-2006 (first entry)
XX
XX Optical DNA analysis process-related oligonucleotide Cy3-dt31-NH2.
XX
XX ss; dna detection; DNA sequencing; DNA amplification; oligo Cy3-dt31-.
XX
XX Unidentified.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1 /*tag= b
XX /*mod_base= 5'-Cy3
XX modified_base 31 /*tag= b
XX /*mod_base= 3'-NH2
XX
XX DE102004025696-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVOXX GMBH.
XX
XX Cherkasov D, Hennig C, Baeuml E;
XX WPI; 2006-185820/20.
XX
XX Ultra-high parallel analysis process to analyse nucleic acid chains in
XX which a sample solid is bound and substrate material.
XX
XX Example 5; Page 95; 141pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. Further claimed is
XX that the process is able to determine many sequences in parallel. The
XX present sequence is that of oligonucleotide Cy3-dt31- which was used in
XX the development of the novel process of the invention.
XX
XX Sequence 31 BP; 0 A; 0 C; 0 G; 31 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 31; DB 1; Length 31;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2739
Db 31 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 81
ADU05084
ID ADU05084 standard; DNA; 33 BP.
XX
XX ADU05084;
XX
DT 27-JAN-2005 (first entry)
```

```

XX DE Homopolymer tail with flexible linker for use with a capture probe.
XX KW severe acute respiratory syndrome; SARS; SARS-CoV; human coronavirus;
XX KW human coronavirus strain 229E; human coronavirus strain OC43;
XX KW SARS infection; ss.
XX OS Synthetic.
XX PN WO2004094675-A2.
XX XX 04-NOV-2004.
XX XX 16-APR-2004; 2004WO-US011636.
XX XX 17-APR-2003; 2003US-046049P.
XX PR 25-APR-2003; 2003US-0465428P.
XX PR 09-MAY-2003; 2003US-0469294P.
XX XX (GENP-) GEN-PROBE INC.
XX XX Linnen JM, Kacian DL, Nelson NC, Getman DK, Vijaysri S;
XX PI WPI; 2004-795575/78.
XX DR
XX XX Determining the presence of severe acute respiratory syndrome coronavirus
XX PT (SARS-CoV) in a test sample, useful for diagnosing SARS, comprises
XX PT contacting a test sample with a specific probe and determining hybrid
XX PT formation.
XX XX
XX PS Example 1; SEQ ID NO 39; 96pp; English.
XX XX
XX CC The specification describes a method for determining the presence of
XX CC severe acute respiratory syndrome coronavirus (SARS-CoV) in a test
XX CC sample. The method comprises contacting a test sample with a probe and
XX CC determining whether the hybrid is present in the test sample as an
XX CC indication of the presence of SARS-CoV in the test sample. The method is
XX CC useful for distinguishing the presence of SARS-CoV from that of human
XX CC coronavirus strains 229E and OC43. The method is useful for diagnosing
XX CC SARS or for monitoring the therapeutic treatment of a SARS-CoV-infected
XX CC individual. The detection probes of the invention are useful as
XX CC amplification oligonucleotides or helper oligonucleotides. The present
XX CC sequence represents a homopolymer tail with a flexible linker for use
XX CC with a capture probe of the invention.
XX XX
XX SQ Sequence 33 BP; 30 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
XX XX
XX Query Match 1.1%; Score 31; DB 1; Length 33;
XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
XX Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 3 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 33

RESULT 82
ADU83547
ID ADU83547 standard; DNA; 33 BP.
XX AC ADU83547;
XX XX
XX DT 10-FEB-2005 (first entry)
XX XX
XX DE Trichomonas vaginalis nucleic acid target capture probe.
XX XX ss; primer; PCR; detection; diagnosis.
XX OS Trichomonas vaginalis.
XX XX
XX PN US2004235139-A1.
XX XX
XX PD 25-NOV-2004.
XX XX
XX Query Match 1.1%; Score 31; DB 1; Length 33;
XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
XX Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 3 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 33

RESULT 82
ADU83547
ID ADU83547 standard; DNA; 33 BP.
XX AC ADU83547;
XX XX
XX DT 10-FEB-2005 (first entry)
XX XX
XX DE Trichomonas vaginalis nucleic acid target capture probe.
XX XX ss; primer; PCR; detection; diagnosis.
XX OS Trichomonas vaginalis.
XX XX
XX PN US2004235139-A1.
XX XX
XX PD 25-NOV-2004.
XX XX
XX Query Match 1.1%; Score 31; DB 1; Length 33;
XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
XX Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 3 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 33

RESULT 83
ADV91960
ID ADV91960 standard; DNA; 33 BP.
XX AC ADV91960;
XX XX
XX DT 07-APR-2005 (first entry)
XX XX
XX DE Prostate cancer specific PCA3 probe SEQ ID NO 41.
XX XX
XX KW DNA detection; diagnosis; prognosis; DNA amplification; prostatic cancer;
XX KW cytostatic; PCA3; probe; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO2005003387-A2.
XX XX
XX PD 13-JAN-2005.
XX XX
XX PF 30-JUN-2004; 2004WO-EF007124.
XX XX
XX PR 30-JUN-2003; 2003CA-02432365.
XX XX
XX PA (UYME-) UNIV MEDICAL CENT NIJMEGEN.
XX XX
XX PI Schalken JA, Verhaegh G, Hessel D, Smit F;
XX XX WPI; 2005-101505/11.
XX DR
XX XX Diagnosing or prognosing prostate cancer in a patient comprises
XX PT amplifying RNA on PCA3 gene using specific primers.
XX XX
XX PS Example 5; SEQ ID NO 41; 50pp; English.

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```

XX PF 18-MAY-2004; 2004US-00848922.
XX XX
XX PR 19-MAY-2003; 2003US-0472028P.
XX XX
XX PA (WEIS/) WEISBURG W G.
XX PA (BUNG/) BUNGO J J.
XX XX
XX PI Weisburg WG, Bungo JJ;
XX XX WPI; 2004-821327/81.
XX DR
XX XX New detection probe, useful for determining or screening for the presence
XX PT of Trichomonas vaginalis in a biological sample.
XX XX
XX PS Example 2; SEQ ID NO 98; 52pp; English.
XX XX
XX CC The invention relates to a detection probe, for determining the presence
XX CC of Trichomonas vaginalis in a test sample, the probe being up to 100
XX CC bases in length and comprising a target binding region which forms a
XX CC hybrid stable for detection with a sequence contained within any of the
XX CC 16 (first) target sequences of 26-32 bp under stringent hybridization
XX CC conditions, where the probe does not form a hybrid stable for detection
XX CC with nucleic acid derived from Trichomonas tenax under the cited
XX CC conditions. The detection probe, oligonucleotide, composition, methods,
XX CC and kits are useful for determining the presence of T. vaginalis in a
XX CC test sample. This sequence corresponds to a target capture probe for the
XX CC T. vaginalis DNA and used in the method of the invention.
XX XX
XX SQ Sequence 33 BP; 30 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
XX XX
XX Query Match 1.1%; Score 31; DB 1; Length 33;
XX Best Local Similarity 100.0%; Pred. No. 1.7e+02;
XX Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 3 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 33

RESULT 83
ADV91960
ID ADV91960 standard; DNA; 33 BP.
XX AC ADV91960;
XX XX
XX DT 07-APR-2005 (first entry)
XX XX
XX DE Prostate cancer specific PCA3 probe SEQ ID NO 41.
XX XX
XX KW DNA detection; diagnosis; prognosis; DNA amplification; prostatic cancer;
XX KW cytostatic; PCA3; probe; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO2005003387-A2.
XX XX
XX PD 13-JAN-2005.
XX XX
XX PF 30-JUN-2004; 2004WO-EF007124.
XX XX
XX PR 30-JUN-2003; 2003CA-02432365.
XX XX
XX PA (UYME-) UNIV MEDICAL CENT NIJMEGEN.
XX XX
XX PI Schalken JA, Verhaegh G, Hessel D, Smit F;
XX XX WPI; 2005-101505/11.
XX DR
XX XX Diagnosing or prognosing prostate cancer in a patient comprises
XX PT amplifying RNA on PCA3 gene using specific primers.
XX XX
XX PS Example 5; SEQ ID NO 41; 50pp; English.

```

XX The invention describes diagnosing or prognosing prostate cancer in a
 CC patient comprising amplifying a prostate cancer specific PCA3 RNA using a
 CC pair of primers, and detecting an amplification product derived from it,
 CC where the amplification product is associated with a presence of prostate
 CC cancer or predisposition to prostate cancer in the patient. Also
 CC described is a diagnostic kit comprising a first container containing a
 CC first pair of primers designed to amplify a PCA3 RNA across an exon
 CC junction of a PCA3 gene. The method and kit are useful for diagnosing or
 CC prognosing prostate cancer in a patient. This sequence represents a probe
 CC used to detect an exon-exon junction to detect PCA3 mRNA.

XX Sequence 33 BP; 30 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
 SQ Query Match 1.1%; Score 31; DB 1; Length 33;
 Best Local Similarity 100.0%; Pred. No. 1.7e+02;
 Matches 31; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2708 TAAAAA 1.1%; Score 31; DB 1; Length 33;
 DB 3 TAAAAA 1.1%; Score 31; DB 1; Length 33;
 3 TAAAAA 1.1%; Score 31; DB 1; Length 33;

RESULT 84

AAT93827/C
 ID AAT93827 standard; DNA; 34 BP.

XX AAT93827;

XX 25-MAR-2003 (revised)

DT 24-FEB-1998 (first entry)

XX Antitumoural phosphodiester oligonucleotide 17 with cytotoxic activity.

XX Phosphodiester; selective binding; cell viability; growth;

KW tumoural cell line; cytotoxic activity; tumour cell; lymphoma;

KW lymphoblastic tumour; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..34

FT /*tag= a

FT /note= "phosphodiester oligonucleotide"

XX WO9720924-A1.

XX 12-JUN-1997.

XX 04-DEC-1996; 96WO-EP005388.

XX 04-DEC-1995; 95IT-MI002539.

XX (SAIC-) SAICOM SRL.

XX Scaggiante B, Quadrioglio F;

XX WPI; 1997-319771/29.

XX New phosphodiesteric oligonucleotide(s) - which exert a specific and
 CC selective cytotoxic effect on tumour cells, for treating both solid and
 CC liquid tumours.

XX Claim 10; Page 6; 38pp; English.

XX Novel phosphodiesteric oligonucleotides AAT93811-27 are based on the
 CC generic formula, in the 3'-5' or 5'-3' direction: (Gat'a')a'-(Gbp'b')b'-
 CC (Gct'c')c'-(Gdt'd')d'-(Gef'e')e'-(Gtf'f')f'-(Gtg'g')g'-'N', where: N and
 CC N' = T or G, equal or different from each other; x = 0-8, equal or
 CC different from each other; a, b, c, d, e, f, and g = 0-10, equal or
 CC different from each other; a', b', c', d', e', f', and g' = 0-30, equal
 CC or different from each other; a'', b'', c'', d'', e'', f'', and g'' = 1-
 CC 16, equal or different from each other; The oligonucleotides are believed

CC to selectively bind and sequester some proteins which are essential to
 CC the viability and growth of tumoural cell line. They have specific and
 CC selective cytotoxic activity against tumour cells, and can be used for
 CC treating tumours of the liquid type, in particular of lymphoblastic
 CC origin, and of solid type, in particular lymphomas. The present
 CC phosphodiester oligonucleotide, at a concentration of 15 micromolar,
 CC reduced growth of CCRF-CEM tumoural cells by 71%, which is detectable 48
 CC hours after administration. (Updated on 25-MAR-2003 to correct PR field.)

XX Sequence 34 BP; 0 A; 0 C; 2 G; 32 T; 0 U; 0 Other;

SQ Query Match 1.1%; Score 30.8; DB 1; Length 34;

Best Local Similarity 94.1%; Pred. No. 1.8e+02;

Matches 32; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2706 ACTAAAA 1.1%; Score 30.8; DB 1; Length 34;

DB 34 ACTAAAA 1.1%; Score 30.8; DB 1; Length 34;

RESULT 85

AAD27124

ID AAD27124 standard; RNA; 37 BP.

XX AAD27124;

XX 09-APR-2002 (first entry)

XX RNA template, (AU)3 used to direct RNA synthesis by HCV RNA polymerase.

XX Hepatitis C virus; HCV replicase; non-structural protein 5B; NS5B;

KW lead compound; RNA polymerase; ss.

XX Unidentified.

XX US6322966-B1.

XX 27-NOV-2001.

XX 11-MAY-1999; 99US-00309670.

XX 11-MAY-1999; 99US-00309670.

XX (ZHON/) ZHONG W.

XX (HONG/) HONG Z.

XX (LAUJ/) LAU J Y N.

XX Zhong W, Hong Z, Lau JYN;

XX WPI; 2002-096587/13.

XX Assay system for hepatitis C virus replicase activity comprises RNA
 CC template with unstable, small stemloop capable of forming copy-back
 CC structure, viral non-structural protein 5B, nucleoside triphosphates,
 CC buffer.

XX Example 1; Fig 2A; 10pp; English.

XX The present invention relates to an assay system for hepatitis C virus
 CC (HCV) replicase activity. The assay system comprises an RNA template that
 CC has an unstable, small stemloop at the 3' end capable of forming a copy-
 CC back structure, a HCV non-structural protein 5B (NS5B), ATP, GTP, CTP,
 CC and UTP nucleoside triphosphates (NTPs), where one of the NTP is
 CC radiolabelled and an assay buffer that supports replication activity of
 CC NS5B. The invention also relates to the identification of optimal
 CC properties of an RNA template for copy-back self-priming RNA synthesis of
 CC HCV. This activity can be used to screen for anti-HCV replicase compounds
 CC or to characterise the biological relevance of lead compounds. The
 CC optimal RNA templates can be used for developing a system to characterise
 CC HCV NS5B polymerase mechanistically and kinetically and for designing
 CC small RNA molecules to co-crystallise with HCV NS5B polymerase. The assay
 CC system of the invention is useful for detecting HCV replicase activity.
 CC The nucleic acid synthesised by NS5B is detected by evaluating an

CC autoradiograph of reaction products separated by gel electrophoresis. The
 CC present sequence is RNA template, (AU)3 used to direct RNA synthesis by
 CC RNA polymerase proteins of HCV, BVDV and poliovirus. This sequence is used
 CC in the exemplification of the invention

XX SQ Sequence 37 BP; 32 A; 0 C; 2 G; 0 T; 3 U; 0 Other;
 Query Match 1.1%; Score 30.8; DB 1; Length 37;
 Best Local Similarity 94.1%; Pred. No. 1.9e+02;
 Matches 32; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2742
 |||||
 Db 3 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAUA 36

RESULT 86

AAA79196
 ID AAA79196 standard; DNA; 31 BP.

XX AC AAA79196;

XX 20-NOV-2000 (first entry)

DE Human genomic DNA polymorphic site sequence tag SEQ ID NO:566.

XX KW Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
 KW hybridisation; polymorphic site; forensic; paternity testing; medicine;
 KW phenotypic trait; genetic analysis; genetic mapping; ds.

XX OS Homo sapiens.

XX PN EP1024200-A2.

XX PD 02-AUG-2000.

XX PF 26-JAN-2000; 2000EP-00250023.

XX PR 27-JAN-1999; 99US-00238402.

XX PA (AFFY-) AFFYMETRIX INC.

XX PI Patil N, Shah N, Warrington JA;

XX WPI; 2000-500198/45.

XX Human genomic polymorphic nucleic acid segments, allele specific primers
 PT and probes, and methods of analysis, useful for e.g. forensics, paternity
 PT testing, genetic mapping.

XX PS Claim 1; Page 21; 141pp; English.

XX The present invention describes a nucleic acid segment of 10-100
 CC contiguous bases chosen from one of 632 fragments (AAA78631 to AAA79262),
 CC where the segment comprises a polymorphic site or an immediately adjacent
 CC base, or the complement of the segment. Also described are: (1) an allele
 CC -specific oligonucleotide that hybridises to a segment of the novelty;
 CC (2) an isolated nucleic acid comprising a sequence of the novelty where
 CC the polymorphic site within the sequence is occupied by a base other than
 CC the reference base indicated in the specification; and (3) analysing a
 CC nucleic acid, comprising obtaining a nucleic acid from an individual, and
 CC determining a base occupying any one of the polymorphic sites of the
 CC novelty. The nucleic acid segments and method can be used to analyse an
 CC individuals nucleic acid sequences for the presence of polymorphisms. The
 CC method can also be used to test for a disease phenotype and correlate the
 CC presence of the phenotype with a particular polymorphism. The presence of
 CC polymorphic sites are useful for, e.g. forensics, paternity testing,
 CC correlation of polymorphisms with phenotypic traits and for genetic
 CC mapping of phenotypic traits. AAA78631 to AAA79262 represent sequence
 CC tags of human genomic DNA fragments containing polymorphic sites. The
 CC base occupying the polymorphic site is indicated using IUPAC-IUB
 CC nomenclature

XX

SQ Sequence 31 BP; 9 A; 9 C; 6 G; 6 T; 0 U; 1 Other;
 Query Match 1.1%; Score 30.6; DB 1; Length 31;
 Best Local Similarity 96.8%; Pred. No. 1.8e+02;
 Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1716 TACTGCTGAAGAAACACCATTTACTGTAGGCC 1746
 |||||
 Db 1 TACTGCTGAAGAAACRCCTTACTGTAGGCC 31

RESULT 87

AAA79197

ID AAA79197 standard; DNA; 31 BP.

XX AC AAA79197;

XX 20-NOV-2000 (first entry)

XX Human genomic DNA polymorphic site sequence tag SEQ ID NO:567.

XX KW Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
 KW hybridisation; polymorphic site; forensic; paternity testing; medicine;
 KW phenotypic trait; genetic analysis; genetic mapping; ds.

XX OS Homo sapiens.

XX PN EP1024200-A2.

XX PD 02-AUG-2000.

XX PF 26-JAN-2000; 2000EP-00250023.

XX PR 27-JAN-1999; 99US-00238402.

XX PA (AFFY-) AFFYMETRIX INC.

XX PI Patil N, Shah N, Warrington JA;

XX WPI; 2000-500198/45.

XX Human genomic polymorphic nucleic acid segments, allele specific primers
 PT and probes, and methods of analysis, useful for e.g. forensics, paternity
 PT testing, genetic mapping.

XX PS Claim 1; Page 21; 141pp; English.

XX The present invention describes a nucleic acid segment of 10-100
 CC contiguous bases chosen from one of 632 fragments (AAA78631 to AAA79262),
 CC where the segment comprises a polymorphic site or an immediately adjacent
 CC base, or the complement of the segment. Also described are: (1) an allele
 CC -specific oligonucleotide that hybridises to a segment of the novelty;
 CC (2) an isolated nucleic acid comprising a sequence of the novelty where
 CC the polymorphic site within the sequence is occupied by a base other than
 CC the reference base indicated in the specification; and (3) analysing a
 CC nucleic acid, comprising obtaining a nucleic acid from an individual, and
 CC determining a base occupying any one of the polymorphic sites of the
 CC novelty. The nucleic acid segments and method can be used to analyse an
 CC individuals nucleic acid sequences for the presence of polymorphisms. The
 CC method can also be used to test for a disease phenotype and correlate the
 CC presence of the phenotype with a particular polymorphism. The presence of
 CC polymorphic sites are useful for, e.g. forensics, paternity testing,
 CC correlation of polymorphisms with phenotypic traits and for genetic
 CC mapping of phenotypic traits. AAA78631 to AAA79262 represent sequence
 CC tags of human genomic DNA fragments containing polymorphic sites. The
 CC base occupying the polymorphic site is indicated using IUPAC-IUB
 CC nomenclature

SQ Sequence 31 BP; 8 A; 4 C; 10 G; 8 T; 0 U; 1 Other;

Query Match 1.1%; Score 30.6; DB 1; Length 31;
 Best Local Similarity 96.8%; Pred. No. 1.8e+02;
 Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```

QY      2201 AAAAGACTGGCTCCTTGGTGGATGAGTTTA 2231
Db      1 AAAAGACTGGCTCCCTTGGTGGATGAGTTTA 31

RESULT 88
AAA79195
ID AAA79195 standard; DNA; 31 BP.
AC AAA79195;
XX
DT 20-NOV-2000 (first entry)
XX
DE Human genomic DNA polymorphic site sequence tag SEQ ID NO:565.
XX
KW Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
KW hybridisation; polymorphic site; forensic; paternity testing; medicine;
KW phenotypic trait; genetic analysis; genetic mapping; ds.
XX
OS Homo sapiens.
XX
PN EP1024200-A2.
XX
PD 02-AUG-2000.
XX
PF 26-JAN-2000; 2000EP-00250023.
XX
PR 27-JAN-1999; 99US-00238402.
XX
PA (APFY-) AFFYMETRIX INC.
XX
PI Patil N, Shah N, Warrington JA;
XX
WPI; 2000-500198/45.
XX
Human genomic polymorphic nucleic acid segments, allele specific primers
and probes, and methods of analysis, useful for e.g. forensics, paternity
testing, genetic mapping,.
XX
Claim 1; Page 21; 141pp; English.
XX
The present invention describes a nucleic acid segment of 10-100
contiguous bases chosen from one of 632 fragments (AAA78631 to AAA79262),
where the segment comprises a polymorphic site or an immediately adjacent
base, or the complement of the segment. Also described are: (1) an allele
-specific oligonucleotide that hybridises to a segment of the novelty;
(2) an isolated nucleic acid comprising a sequence of the novelty where
the polymorphic site within the sequence is occupied by a base other than
the reference base indicated in the specification; and (3) analysing a
nucleic acid, comprising obtaining a nucleic acid from an individual, and
determining a base occupying any one of the polymorphic sites of the
individuals nucleic acid segments and method can be used to analyse an
novelty. The nucleic acid sequences for the presence of polymorphisms. The
method can also be used to test for a disease phenotype and correlate the
presence of the phenotype with a particular polymorphism. The presence of
polymorphic sites are useful for, e.g. forensics, paternity testing,
correlation of polymorphisms with phenotypic traits and for genetic
mapping of phenotypic traits. AAA78631 to AAA79262 represent sequence
tags of human genomic DNA fragments containing polymorphic sites. The
base occupying the polymorphic site is indicated using IUPAC-IUB
nomenclature
XX
Sequence 31 BP; 8 A; 8 C; 7 G; 7 T; 0 U; 1 Other;
SQ
Query Match 1.1%; Score 30.6; DB 1; Length 31;
Best Local Similarity 96.8%; Pred. No. 1.8e+02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1592 CCTAGCGATACCAAGAGGCTCTCAGATCTATG 1622
Db      1 CCTAGCGATACCAAGGCTCTCAGATCTATG 31

RESULT 89
AAA79199
ID AAA79199 standard; DNA; 31 BP.
AC AAA79199;
XX
DT 20-NOV-2000 (first entry)
XX
DE Human genomic DNA polymorphic site sequence tag SEQ ID NO:569.
XX
KW Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
KW hybridisation; polymorphic site; forensic; paternity testing; medicine;
KW phenotypic trait; genetic analysis; genetic mapping; ds.
XX
OS Homo sapiens.
XX
PN EP1024200-A2.
XX
PD 02-AUG-2000.
XX
PF 26-JAN-2000; 2000EP-00250023.
XX
PR 27-JAN-1999; 99US-00238402.
XX
PA (APFY-) AFFYMETRIX INC.
XX
PI Patil N, Shah N, Warrington JA;
XX
WPI; 2000-500198/45.
XX
Human genomic polymorphic nucleic acid segments, allele specific primers
and probes, and methods of analysis, useful for e.g. forensics, paternity
testing, genetic mapping,.
XX
Claim 1; Page 21; 141pp; English.
XX
The present invention describes a nucleic acid segment of 10-100
contiguous bases chosen from one of 632 fragments (AAA78631 to AAA79262),
where the segment comprises a polymorphic site or an immediately adjacent
base, or the complement of the segment. Also described are: (1) an allele
-specific oligonucleotide that hybridises to a segment of the novelty;
(2) an isolated nucleic acid comprising a sequence of the novelty where
the polymorphic site within the sequence is occupied by a base other than
the reference base indicated in the specification; and (3) analysing a
nucleic acid, comprising obtaining a nucleic acid from an individual, and
determining a base occupying any one of the polymorphic sites of the
individuals nucleic acid segments and method can be used to analyse an
novelty. The nucleic acid sequences for the presence of polymorphisms. The
method can also be used to test for a disease phenotype and correlate the
presence of the phenotype with a particular polymorphism. The presence of
polymorphic sites are useful for, e.g. forensics, paternity testing,
correlation of polymorphisms with phenotypic traits and for genetic
mapping of phenotypic traits. AAA78631 to AAA79262 represent sequence
tags of human genomic DNA fragments containing polymorphic sites. The
base occupying the polymorphic site is indicated using IUPAC-IUB
nomenclature
XX
Sequence 31 BP; 9 A; 4 C; 14 G; 3 T; 0 U; 1 Other;
SQ
Query Match 1.1%; Score 30.6; DB 1; Length 31;
Best Local Similarity 96.8%; Pred. No. 1.8e+02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2419 CGGGCTGAAGAGTGGTCTCTGAAGAGCAGGAG 2449
Db      1 CGGGCTGAAGAGTGGKCTCTGAAGAGCAGGAG 31

RESULT 90
AAA79193
ID AAA79193 standard; DNA; 31 BP.
XX

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AC AAA79193;
XX
XX 20-NOV-2000 (first entry)
XX
XX Human genomic DNA polymorphic site sequence tag SEQ ID NO:563.
XX
XX Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
XX hybridisation; polymorphic site; forensic; paternity testing; medicine;
XX phenotypic trait; genetic analysis; genetic mapping; ds.
XX
XX Homo sapiens.
XX
XX EPI024200-A2.
XX
XX 02-AUG-2000.
XX
XX 26-JAN-2000; 2000EP-00250023.
XX
XX 27-JAN-1999; 99US-00238402.
XX
XX (AFFY-) AFFYMETRIX INC.
XX
XX Patil N, Shah N, Warrington JA;
XX
XX WPI; 2000-500198/45.
XX
XX Human genomic polymorphic nucleic acid segments, allele specific primers
XX and probes, and methods of analysis, useful for e.g. forensics, paternity
XX testing, genetic mapping,.
XX
XX Claim 1; Page 21; 141pp; English.
XX
XX The present invention describes a nucleic acid segment of 10-100
XX contiguous bases chosen from one of 632 fragments (AAA78631 to AAA79262),
XX where the segment comprises a polymorphic site or an immediately adjacent
XX base, or the complement of the segment. Also described are: (1) an allele
XX -specific oligonucleotide that hybridises to a segment of the novelty;
XX (2) an isolated nucleic acid comprising a sequence of the novelty where
XX the polymorphic site within the sequence is occupied by a base other than
XX the reference base indicated in the specification; and (3) analysing a
XX nucleic acid, comprising obtaining a nucleic acid from an individual, and
XX determining a base occupying any one of the polymorphic sites of the
XX novelty. The nucleic acid segments and method can be used to analyse an
XX individuals nucleic acid sequences for the presence of polymorphisms. The
XX method can also be used to test for a disease phenotype and correlate the
XX presence of the phenotype with a particular polymorphism. The presence of
XX polymorphic sites are useful for, e.g. forensics, paternity testing,
XX correlation of polymorphisms with phenotypic traits and for genetic
XX mapping of phenotypic traits. AAA78631 to AAA79262 represent sequence
XX tags of human genomic DNA fragments containing polymorphic sites. The
XX base occupying the polymorphic site is indicated using IUPAC-IUB
XX nomenclature
XX
XX Sequence 31 BP; 5 A; 6 C; 8 G; 11 T; 0 U; 1 Other;
XX
XX Query Match 1.1%; Score 30.6; DB 1; Length 31;
XX Best Local Similarity 96.8%; Pred. No. 1.8e+02;
XX Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX
XX 777 TGGTTGATGCTCCAGGCTATGTTGAATC 807
XX
XX 1 TGGTTGATGCTCCAGGCTATGTTGAATC 31
XX
XX
XX RESULT 91
XX AAA79198
XX ID AAA79198 standard; DNA; 31 BP.
XX
XX AAA79198;
XX
XX 20-NOV-2000 (first entry)
XX
XX Human genomic DNA polymorphic site sequence tag SEQ ID NO:568.
XX

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XX
XX Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
XX hybridisation; polymorphic site; forensic; paternity testing; medicine;
XX phenotypic trait; genetic analysis; genetic mapping; ds.
XX
XX Homo sapiens.
XX
XX EPI024200-A2.
XX
XX 02-AUG-2000.
XX
XX 26-JAN-2000; 2000EP-00250023.
XX
XX 27-JAN-1999; 99US-00238402.
XX
XX (AFFY-) AFFYMETRIX INC.
XX
XX Patil N, Shah N, Warrington JA;
XX
XX WPI; 2000-500198/45.
XX
XX Human genomic polymorphic nucleic acid segments, allele specific primers
XX and probes, and methods of analysis, useful for e.g. forensics, paternity
XX testing, genetic mapping,.
XX
XX Claim 1; Page 21; 141pp; English.
XX
XX The present invention describes a nucleic acid segment of 10-100
XX contiguous bases chosen from one of 632 fragments (AAA78631 to AAA79262),
XX where the segment comprises a polymorphic site or an immediately adjacent
XX base, or the complement of the segment. Also described are: (1) an allele
XX -specific oligonucleotide that hybridises to a segment of the novelty;
XX (2) an isolated nucleic acid comprising a sequence of the novelty where
XX the polymorphic site within the sequence is occupied by a base other than
XX the reference base indicated in the specification; and (3) analysing a
XX nucleic acid, comprising obtaining a nucleic acid from an individual, and
XX determining a base occupying any one of the polymorphic sites of the
XX novelty. The nucleic acid segments and method can be used to analyse an
XX individuals nucleic acid sequences for the presence of polymorphisms. The
XX method can also be used to test for a disease phenotype and correlate the
XX presence of the phenotype with a particular polymorphism. The presence of
XX polymorphic sites are useful for, e.g. forensics, paternity testing,
XX correlation of polymorphisms with phenotypic traits and for genetic
XX mapping of phenotypic traits. AAA78631 to AAA79262 represent sequence
XX tags of human genomic DNA fragments containing polymorphic sites. The
XX base occupying the polymorphic site is indicated using IUPAC-IUB
XX nomenclature
XX
XX Sequence 31 BP; 9 A; 7 C; 5 G; 9 T; 0 U; 1 Other;
XX
XX Query Match 1.1%; Score 30.6; DB 1; Length 31;
XX Best Local Similarity 96.8%; Pred. No. 1.8e+02;
XX Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX
XX 2228 TTTAAGGAGCTTTTACCACCCAGATTACA 2258
XX
XX 1 TTTAAGGAGCTTTTACCACCCAGATTACA 31
XX
XX
XX RESULT 92
XX AAA79194
XX ID AAA79194 standard; DNA; 31 BP.
XX
XX AAA79194;
XX
XX 20-NOV-2000 (first entry)
XX
XX Human genomic DNA polymorphic site sequence tag SEQ ID NO:564.
XX
XX Human; genomic DNA; polymorphism; genome; allele-specific; primer; probe;
XX hybridisation; polymorphic site; forensic; paternity testing; medicine;
XX phenotypic trait; genetic analysis; genetic mapping; ds.
XX

```


XX Detecting or diagnosing a kidney disease, e.g. renal cancer or
 PT glomerulonephritis, comprises determining the presence of expression of a
 PT podocyte gene for nephrin or proximal tubular cell gene for Indian
 PT hedgehog in a urine sample.

XX Claim 39; Page 24; Opp; English.

XX The present invention relates to a method of detecting a kidney disease,
 CC which comprises screening a mammalian urine sample for expression of a
 CC specific gene that is present in the urine sample only when cells
 CC indicating kidney disease are present, where the concentration of
 CC detectable albumin in the urine sample has a range of 0-30 mg/dl. The
 CC method is useful for detecting or diagnosing a kidney disease or
 CC disorders associated with e.g. glomerulonephritis, nephritic syndrome,
 CC diabetes, lupus, hypertension, acute tubular necrosis, renal obstructive
 CC disorders, renal cancers, and other diseases or symptoms. The podocyte
 CC gene for nephrin or the proximal tubular cell gene for Indian hedgehog is
 CC useful as selectable markers for a kidney disease. The present sequence
 CC is a PCR primer used to detect the human beta-actin gene

XX SQ Sequence 32 BP; 2 A; 0 C; 1 G; 29 T; 0 U; 0 Other;

Query Match 1.1%; Score 30.4; DB 1; Length 32;
 Best Local Similarity 96.9%; Pred. No. 1.8e+02;
 Matches 31; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTTAAAAA 1; Mismatches 1; Indels 0; Gaps 0;

DB 32 CTTAAAAA 1; Mismatches 1; Indels 0; Gaps 0;

RESULT 95

AAS17761/c

ID AAS17761 standard; DNA; 31 BP.

AC AAS17761;

DT 12-MAR-2002 (first entry)

DE Oligo d(T) PCR primer.

KW Oligo d(T); ss; differential subtraction; PCR primer;
 KW double exponential elimination; tumour.

OS Synthetic.

PN US6316192-B1.

PD 13-NOV-2001.

PF 11-MAR-1999; 99US-00268505.

PR 11-MAR-1999; 99US-00268505.

PA (LUOJ)/ LUO J.

PI Luo J;

DR WPI; 2002-074371/10.

PT Selective elimination of non-targeted DNA sequences for rapid isolation
 PT and enrichment of the differences of DNA fragments between two pools of
 PT DNA, comprises converting testers to drivers.

PS Claim 6; Col 5; 23pp; English.

XX The invention comprises rapid isolation and enrichment of the differences
 CC of DNA fragments between two pools of DNA, comprises converting
 CC undesirable testers (DNA being subtracted) to drivers (DNA used to
 CC subtract) and re-utilising converted drivers in repeats of subtraction to
 CC achieve double exponential elimination of undesirable tester sequences.
 CC The method comprises (a) attaching a nucleic acid fragment to 1 or more

CC polymerase chain reaction (PCR) adapters to form an adapter-attached
 CC nucleic acid fragment, followed by amplifying the adapter-attached
 CC nucleic acid fragment through PCR with primers containing nucleic acid
 CC sequences complementary to nucleic acid sequences of the adapter to form
 CC an adapter-attached nucleic acid tester, (b) mixing the adapter-attached
 CC nucleic acid tester with a nucleic acid driver that contains no attached
 CC adapter or contains an attached adapter whose sequence differs from the
 CC the tester/driver nucleic acid mixture, (c) denaturing and re-annealing
 CC the mixture an effective amount of reagents necessary for removing the
 CC adapter sequence from the tester/ driver hetero-duplex and (e) repeating
 CC step (c) to (d) at least once (no amplification takes place and no
 CC additional driver is added). The method is used for rapid isolation and
 CC enrichment of the differences of DNA fragments between two pools of DNA
 CC e.g. in the search for tumour specific sequences. The method has 2
 CC improvements over the methods disclosed by Yang et al. (1996), Lisitsyn
 CC et al. (1993), Straus et al. (1990) by (i) bypassing the need of a
 CC polymerase chain reaction (PCR) amplification or physical separation of
 CC desirable testers from undesirable ones in each repeat of subtraction, it
 CC eliminates the necessity of tester dilution in each repeat of
 CC subtraction, and (ii) by utilising the converted driver from each repeat
 CC of subtraction, it eliminates the need for re-introducing additional
 CC driver into hybridisation in each repeat of subtraction. The present
 CC sequence is an Oligo d(T) PCR primer used in the method of the invention

XX SQ Sequence 31 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 1 Other;

Query Match 1.1%; Score 30.2; DB 1; Length 31;

Best Local Similarity 96.8%; Pred. No. 1.9e+02;

Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA 1; Mismatches 1; Indels 0; Gaps 0;

DB 31 BAAAAA 1; Mismatches 1; Indels 0; Gaps 0;

RESULT 96

AE64867/c

ID AEE64867 standard; DNA; 31 BP.

AC AEE64867;

DT 09-FEB-2006 (first entry)

DE cDNA first strand synthesis primer.

KW ss; primer; gene expression; diagnosis.

OS Synthetic.

PN WO2005118791-A1.

PD 15-DEC-2005.

PF 17-MAR-2005; 2005WO-JP004788.

PR 03-JUN-2004; 2004JP-00165208.

PA (AGEN) NAT INST RADIOLOGICAL SCI.

PI Abe M, Araki R;

DR WPI; 2006-047539/05.

PT Producing gene expression profile by high coverage expression profiling
 PT analysis, by increasing mRNA in sample by obtaining amplified RNA
 PT complementary to cDNA using RNA polymerase, increasing double-stranded
 PT cDNAs having primers by PCR.

PS Example; SEQ ID NO 1; 49pp; Japanese.

XX The invention relates to a method of producing a gene expression profile.
 CC The method is useful for producing gene expression profile. The method is

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CC useful in the diagnosis of pathological conditions. The method enables
CC preparation of cellular gene expression profile from an extremely small
CC number of cells, pathological samples, micro tissues, etc., whose
CC handling has been infeasible because of limited sample amount. The gene-
CC expression profile can be obtained from trace amounts of sample by
CC improved high coverage gene-expression profile analysis method. The
CC method has high detection sensitivity with respect to gene expression.
CC The present sequence represents a cDNA first strand synthesis primer.
XX
SQ Sequence 31 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 1 Other;

Query Match 1.1%; Score 30.2; DB 1; Length 31;
Best Local Similarity 96.8%; Pred. No. 1.9e+02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA.....AAAAAAAAAAAAAAAAAAAAA 2738
Db 31 BAAAAA.....AAAAAAAAAAAAAAAAAAAAA 1

RESULT 97
AAS09500/c
ID AAS09500 standard; DNA; 32 BP.
XX
AC AAS09500;
XX
DT 24-OCT-2001 (first entry)
XX
DE SMART PCR primer #2.
XX
KW Heat-labile uracil-DNA glycosylase; UNG; UDG; PCR primer; SMART;
KW PCR control; LCR control; ligase chain reaction; carry-over prevention;
KW ss.
XX
OS Synthetic.
XX
PN W0200151623-A1.
XX
PD 19-JUL-2001.
XX
PF 10-JAN-2001; 2001W0-N0000008.
XX
PR 12-JAN-2000; 2000NO-00000163.
XX
PT 27-OCT-2000; 2000NO-00005428.
XX
PA (BIOT-) BIOTEC ASA.
XX
PI Lanes O, Willasen NP, Guddal PH, Gjellesvik DR;
XX
DR WPI; 2001-451854/48.
XX
CC New cod liver uracil-DNA glycosylase enzyme, useful in monitoring or
CC controlling a reaction system multiplying DNA sequences or in carry-over
CC prevention procedures.
XX
PS Example 2; Page 20; 59pp; English.
XX
CC The sequence represents a SMART PCR primer used to synthesise first
CC strand cDNA from Atlantic cod in order to isolate cDNAs encoding heat-
CC labile uracil-DNA glycosylase, (UNG/UDG). The enzyme is useful in
CC monitoring and/or controlling a reaction system multiplying DNA
CC sequences, e.g. PCR (polymerase chain reaction) or LCR (ligase chain
CC reaction). The enzyme is also useful in carry-over prevention procedures
XX
SQ Sequence 32 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 2 Other;

Query Match 1.1%; Score 30.2; DB 1; Length 32;
Best Local Similarity 93.8%; Pred. No. 1.9e+02;
Matches 30; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAA.....AAAAAAAAAAAAAAAAAAAAA 2738
Db 32 BAAAAA.....AAAAAAAAAAAAAAAAAAAAA 1

CC useful in the diagnosis of pathological conditions. The method enables
CC preparation of cellular gene expression profile from an extremely small
CC number of cells, pathological samples, micro tissues, etc., whose
CC handling has been infeasible because of limited sample amount. The gene-
CC expression profile can be obtained from trace amounts of sample by
CC improved high coverage gene-expression profile analysis method. The
CC method has high detection sensitivity with respect to gene expression.
CC The present sequence represents a cDNA first strand synthesis primer.
XX
SQ Sequence 31 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 1 Other;

Query Match 1.1%; Score 30.2; DB 1; Length 31;
Best Local Similarity 96.8%; Pred. No. 1.9e+02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA.....AAAAAAAAAAAAAAAAAAAAA 2738
Db 31 BAAAAA.....AAAAAAAAAAAAAAAAAAAAA 1

RESULT 98
ABA01204/c
ID ABA01204 standard; DNA; 32 BP.
XX
AC ABA01204;
XX
DT 11-SEP-2003 (revised)
DT 28-JAN-2002 (first entry)
XX
DE Mamushi fibrinolytic enzyme, brevinase, PCR primer, BBRP1.
XX
KW Fibrinolytic enzyme; brevinase; thermostable; thrombolytic agent;
KW mamushi; PCR primer; ss.
XX
OS Agkistrodon blomhoffi; brevicaudus.
XX
PN KR2001045716-A.
XX
PD 05-JUN-2001.
XX
PF 06-NOV-1999; 99KR-00049115.
XX
PR 06-NOV-1999; 99KR-00049115.
XX
PA (LEBJ/) LEE J W.
XX
PI (PARK/) PARK W.
XX
PI Lee JW, Park W;
XX
DR WPI; 2001-636862/73.
XX
PT Fibrinolytic enzyme, brevinase, separated from poison of viper,
PT agkistrodon blomhoffi brevicaudus.
XX
PS Example 5; Page 6; 23pp; Korean.
XX
CC The present invention relates to fibrinolytic enzyme, brevinase (see
CC AAG79000), which is separated from the poison of Agkistrodon blomhoffi
CC brevicaudus (mamushi). The enzyme shows stability at high temperatures
CC and is thus useful in developing thrombolytic agents. The present
CC sequence is a PCR primer, which was used in an example from the present
CC invention. (Updated on 11-SEP-2003 to standardise OS field)
XX
SQ Sequence 32 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 2 Other;

Query Match 1.1%; Score 30.2; DB 1; Length 32;
Best Local Similarity 96.8%; Pred. No. 1.9e+02;
Matches 30; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA.....AAAAAAAAAAAAAAAAAAAAA 2738
Db 31 BAAAAA.....AAAAAAAAAAAAAAAAAAAAA 1

RESULT 99
AAN70277/c
ID AAN70277 standard; DNA; 30 BP.
XX
AC AAN70277;
XX
DT 03-OCT-2002 (revised)
DT 26-MAY-1991 (first entry)
XX
DE Sequence of scissile link probe MRC064 (HL).
XX
KW Hybridisation; probe; ss.
XX
OS Synthetic.
XX
PN EP227976-A.
XX
```

```

PD 08-JUL-1987.
XX
XX 04-DEC-1986; 86EP-00116906.
XX
XX 05-DEC-1985; 85US-00805279.
XX
XX (MEIO-) MEOGENICS INC.
XX
XX Duck P, Bender R, Crosby W, Robertson JG;
XX
XX WPI; 1987-186567/27.
XX
XX Synthetic nucleic acid probes - comprising two nucleic acid sequences
XX linked by a scissile linkage.
XX
XX Example; p29; 46pp; English.
XX
XX The patent claims a new molecule of formula (NA1----S----NA2)n. NA1 and
XX NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile
XX linkage; n = 1 or 1,000, which is used for the detection of specific DNA
XX or RNA sequences in a test soln. The scissile link probes may be PL
XX CC (Permanent Linkage to Solid Support) or HL (Hydrolysable Linkage to Solid
XX CC Support). The differential liability of DNA and RNA may be exploited in a
XX CC heterogeneous system when the scissile linkage is an RNA molecule. In the
XX CC examples, counter probe molecules 9 through 16 were used to determine
XX CC suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
XX CC OS field.)
XX
XX SQ Sequence 30 BP; 0 A; 0 C; 0 G; 22 T; 8 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 100
AA92243/c
ID AA92243 standard; DNA; 30 BP.
XX
XX AC AA92243;
XX
XX DT 25-MAR-2003 (revised)
XX DT 31-OCT-2002 (revised)
XX DT 25-APR-1990 (first entry)
XX
XX SS probe MRCO64.
XX
XX Probe MRCO64; solid support; ribonuclease.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX misc_feature 1..12 /*tag= a
XX /note= "deoxyribonucleotides."
XX
XX misc_feature 13..20 /*tag= b
XX /note= "ribonucleotides."
XX
XX misc_feature 21..30 /*tag= c
XX /note= "deoxyribonucleotides."
XX
XX WO8910415-A.
XX
XX 02-NOV-1989.
XX
XX 29-APR-1988; 88US-00187814.
XX
XX 29-APR-1988; 88US-00187814.

```

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XX
XX (MEIO-) MEOGENICS INC.
XX
XX Duck P, Bender R;
XX
XX WPI; 1989-339977/46.
XX
XX Detecting target nucleic acid molecules - using excess complementary
XX nucleic acid probes and nicking to complete a cycling sequence.
XX
XX Disclosure; Page 24; 34pp; English.
XX
XX Probe MRCO64 is bound by a hydrolysable linkage to a solid support at its
XX 3' end. It is used by reacting excess probe with a target nucleic acid;
XX nicking hybridised probe at least once within a predetermined sequence to
XX form 2 or more probe fragments hybridised to the target sequence, which
XX results in the probe fragments becoming hybridised to another probe; and
XX identifying probe fragments, so detecting the target sequence. The probe
XX can react with target sequence to complete a cycling sequence. Using this
XX CC system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can
XX CC be obt'd. The probe is cleavable at the ribonucleotides by a ds RNase, eg
XX CC RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)
XX CC (Updated on 25-MAR-2003 to correct PR field.)
XX
XX SQ Sequence 30 BP; 0 A; 0 C; 0 G; 22 T; 8 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 101
AAQ36302/c
ID AAQ36302 standard; DNA; 30 BP.
XX
XX AC AAQ36302;
XX
XX DT 25-MAR-2003 (revised)
XX DT 07-JUN-1993 (first entry)
XX
XX GST3anti, for GSTpi gene target sequence.
XX
XX Glutathione-S-transferase pi; cancer; drug resistance; chemotherapy;
XX sensitisation; triplex; target; duplex; ss.
XX
XX Synthetic.
XX
XX US5176996-A.
XX
XX 05-JAN-1993.
XX
XX 22-DEC-1989; 89US-00453532.
XX
XX 20-DEC-1988; 88US-00287359.
XX
XX (BAYU ) BAYLOR COLLEGE MEDICINE.
XX
XX Hogan ME, Kessler DJ;
XX
XX WPI; 1993-035718/04.
XX
XX Synthetic oligo-nucleotide(s), prodn. useful e.g. for HIV-1 inhibition -
XX which bind to target sequence in duplex DNA forming colinear triplex by
XX binding to major groove.
XX
XX Example 8; Col 27; 29pp; English.
XX
XX Overexpression of the enzyme glutathione-S-transferase pi has been
XX implicated as being responsible for the broad range drug resistance which

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CC develops in a variety of cancers. Expression of the gene may be prevented
CC by the formation of a triplex between the duplex target DNA sequence and
CC an anti parallel or parallel synthetic oligonucleotide. A suitable target
CC sequence is that from base -499 to -410 of GSTpi, an unusual repetitive
CC DNA segment within the control domain. Oligonucleotides targetted against
CC this sequence will repress GSTpi transcription. See also AAQ36219-362.
CC (Updated on 25-MAR-2003 to correct PF field.)
CC
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 102
AAQ36301/c
ID AAQ36301 standard; DNA; 30 BP.
XX
AC AAQ36301;
XX
XX 25-MAR-2003 (revised)
DT 07-JUN-1993 (first entry)
XX
XX GST3par, for GSTpi gene target sequence.
XX
XX Glutathione-s-transferase pi; cancer; drug resistance; chemotherapy;
KW sensitisation; triplex; target; duplex; ss.
XX
OS Synthetic.
XX
XX US5176996-A.
XX
XX 05-JAN-1993.
XX
XX 22-DEC-1989; 89US-00453532.
XX
XX 20-DEC-1988; 88US-00287359.
XX
XX (BAYU ) BAYLOR COLLEGE MEDICINE.
XX
XX Hogan ME, Kessler DJ;
PI
PI WPI; 1993-035718/04.
XX
XX Synthetic oligo-nucleotide(s), prodn. useful e.g. for HIV-1 inhibition -
PT which bind to target sequence in duplex DNA forming colinear triplex by
PT binding to major groove.
XX
XX Example 8; Col 27; 29pp; English.
XX
XX Overexpression of the enzyme glutathione-s-transferase pi has been
CC implicated as being responsible for the broad range drug resistance which
CC develops in a variety of cancers. Expression of the gene may be prevented
CC by the formation of a triplex between the duplex target DNA sequence and
CC an anti parallel or parallel synthetic oligonucleotide. A suitable target
CC sequence is that from base -499 to -410 of GSTpi, an unusual repetitive
CC DNA segment within the control domain. Oligonucleotides targetted against
CC this sequence will repress GSTpi transcription. See also AAQ36219-362.
CC (Updated on 25-MAR-2003 to correct PF field.)
XX
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 103
AAQ36301/c
ID AAQ36301 standard; DNA; 30 BP.
XX
AC AAQ36301;
XX
XX 19-JUL-1999 (first entry)
DT
DE WO9923258 oligonucleotide primer 2.
XX
XX Visual; nucleic acid detection; target; hybridisation; probe; primer;
KW agglutination; bridging molecule; ss.
XX
OS Synthetic.
XX
XX WO9923258-A1.
XX
XX 14-MAY-1999.
PD
XX 30-OCT-1998; 98WO-US023267.
PF
XX 31-OCT-1997; 97US-0063969P.
PR
XX (GENP-) GEN-PROBE INC.
PA
XX Weisburg WG, Stull PD, Reshatoff MR;
PI
XX WPI; 1999-326994/27.
XX
XX Optical detection of hybridization complexes for specific target nucleic
PT acid sequences.
XX
XX Example 1; Page 40; 46pp; English.
XX
XX This invention describes a novel method for the visual detection of
CC target nucleic acid presence in a sample. A preferred target is a
CC Mycobacterium complex nucleic acid sequence. The detection method uses
CC visual detection of a change in the hybridization without aid of
CC instrumentation. Multiple copies of a target nucleic acid sequence are
CC mixed with first and second detectable probes under hybridizing
CC conditions favouring particulate agglutination via a bridging molecule
CC allowing for visual detection of the target nucleic acid sequence. The
CC bridging molecule enhances or inhibits formation of a hybridization
CC complex
XX
XX Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 104
AAQ36301/c
ID AAQ36301 standard; DNA; 30 BP.
XX
AC AAQ36301;
XX
XX 12-JUN-2001 (first entry)
DT
DE Immunostimulatory nucleic acid #1005.
XX
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
```

```
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 103
AAQ36301/c
ID AAQ36301 standard; DNA; 30 BP.
XX
AC AAQ36301;
XX
XX 19-JUL-1999 (first entry)
DT
DE WO9923258 oligonucleotide primer 2.
XX
XX Visual; nucleic acid detection; target; hybridisation; probe; primer;
KW agglutination; bridging molecule; ss.
XX
OS Synthetic.
XX
XX WO9923258-A1.
XX
XX 14-MAY-1999.
PD
XX 30-OCT-1998; 98WO-US023267.
PF
XX 31-OCT-1997; 97US-0063969P.
PR
XX (GENP-) GEN-PROBE INC.
PA
XX Weisburg WG, Stull PD, Reshatoff MR;
PI
XX WPI; 1999-326994/27.
XX
XX Optical detection of hybridization complexes for specific target nucleic
PT acid sequences.
XX
XX Example 1; Page 40; 46pp; English.
XX
XX This invention describes a novel method for the visual detection of
CC target nucleic acid presence in a sample. A preferred target is a
CC Mycobacterium complex nucleic acid sequence. The detection method uses
CC visual detection of a change in the hybridization without aid of
CC instrumentation. Multiple copies of a target nucleic acid sequence are
CC mixed with first and second detectable probes under hybridizing
CC conditions favouring particulate agglutination via a bridging molecule
CC allowing for visual detection of the target nucleic acid sequence. The
CC bridging molecule enhances or inhibits formation of a hybridization
CC complex
XX
XX Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 104
AAQ36301/c
ID AAQ36301 standard; DNA; 30 BP.
XX
AC AAQ36301;
XX
XX 12-JUN-2001 (first entry)
DT
DE Immunostimulatory nucleic acid #1005.
XX
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
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XX OS Synthetic.
XX PN WO200122972-A2.
XX PD 05-APR-2001.
XX PF 25-SEP-2000; 2000WO-US026383.
XX PR 25-SEP-1999; 99US-0156113P.
XX PR 27-SEP-1999; 99US-0156135P.
XX PR 23-AUG-2000; 2000US-0227436P.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PA (COLE-) COLEY PHARM GMBH.
XX PI Krieg AM, Schetter C, Vollmer J;
XX DR WPI; 2001-273485/28.
XX PT Vaccinating against tumors, infectious diseases, allergies and asthma
XX PT using immunostimulatory Py-rich and TG nucleic acids.
XX PS Example 6; Page 60; 338pp; English.
XX CC The present invention relates to a method for stimulating an immune
XX CC response. The method comprises administering an immunostimulatory nucleic
XX CC acid to a non-rodent subject in sufficient quantity to stimulate an
XX CC immune response. The present sequence is one such immunostimulatory
XX CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX CC also useful for preventing cancer, asthma, infectious disease, allergy or
XX CC immune deficiency. The present sequence can also be used to redirect a
XX CC Th2 to a Th1 immune response and to activate immune cells. Note: the
XX CC present sequence may have a phosphorothioate backbone
XX SQ Sequence 30 BP; 30 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 30

RESULT 105
AAF99888/c
ID AAF99888 standard; DNA; 30 BP.
AC AAF99888;
XX 12-JUN-2001 (first entry)
XX DE Immunostimulatory nucleic acid #1004.
XX KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
XX KW immunostimulatory; tumour; viral infection; bacterial infection;
XX KW fungal infection; parasitic infection; cancer; asthma;
XX KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX OS Synthetic.
XX PN WO200122972-A2.
XX PD 05-APR-2001.
XX PF 25-SEP-2000; 2000WO-US026383.

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XX 25-SEP-1999; 99US-0156113P.
XX PR 27-SEP-1999; 99US-0156135P.
XX PR 23-AUG-2000; 2000US-0227436P.
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PA (COLE-) COLEY PHARM GMBH.
XX PI Krieg AM, Schetter C, Vollmer J;
XX DR WPI; 2001-273485/28.
XX PT Vaccinating against tumors, infectious diseases, allergies and asthma
XX PT using immunostimulatory Py-rich and TG nucleic acids.
XX PS Example 6; Page 60; 338pp; English.
XX CC The present invention relates to a method for stimulating an immune
XX CC response. The method comprises administering an immunostimulatory nucleic
XX CC acid to a non-rodent subject in sufficient quantity to stimulate an
XX CC immune response. The present sequence is one such immunostimulatory
XX CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX CC also useful for preventing cancer, asthma, infectious disease, allergy or
XX CC immune deficiency. The present sequence can also be used to redirect a
XX CC Th2 to a Th1 immune response and to activate immune cells. Note: the
XX CC present sequence may have a phosphorothioate backbone
XX SQ Sequence 30 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
DB 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 106
ABK10416
ID ABK10416 standard; DNA; 30 BP.
XX ABK10416;
XX 21-MAY-2002 (first entry)
XX DE Synthetic primer sequence 5'-A30-3'.
XX KW ss; 5'-A30-3'; double stranded DNA generation; promiscuous base;
XX KW target molecule; primer.
XX OS Synthetic.
XX PN US6326143-B1.
XX PD 04-DEC-2001.
XX PF 22-MAY-1998; 98US-00083123.
XX PR 22-NOV-1996; 96WO-EP005149.
XX PA (HOFF ) ROCHE DIAGNOSTICS GMBH.
XX PI Orum H, Seeger C;
XX DR WPI; 2002-214947/27.
XX PT Determining an analyte in a sample, for generating multiple double

```



```

Db      30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 108
ABK70490/c
ID      ABK70490 standard; DNA; 30 BP.
XX
XX
AC      ABK70490;
XX
XX      15-JUL-2002 (first entry)
XX
XX      In-situ analysis synthetic probe #58.
XX
XX      Human; oligonucleotide label-domain; CMV; cytomegalovirus; EBV;
XX      Epstein-Barr virus; lambda-immunoglobulin light chain; haptens;
XX      kappa-immunoglobulin light chain; repetitive Alu sequence; EBER;
XX      Epstein-Barr early RNA; probe; ss.
XX
OS      Synthetic.
XX
XX      WO200222874-A2.
XX
XX      21-MAR-2002.
XX
XX      06-SEP-2001; 2001WO-US028014.
XX
XX      15-SEP-2000; 2000US-0233177P.
XX
XX      (VENT-) VENTANA MEDICAL SYSTEMS INC.
XX
XX      Utermohlen JG, Connaughton J;
XX
XX      WPI; 2002-371972/40.
XX
XX      Novel oligonucleotide label-domain for incorporation into oligonucleotide
XX      probes useful for detecting or localizing nucleic acid target genes
XX      within a cell or tissue sample.
XX
XX      Disclosure; Page 69; 71pp; English.
XX
XX      The present invention relates to a new oligonucleotide label-domain
XX      comprising the sequence (CTAATT)n and its complement (AAATAG)n, where
XX      n is 1. The probe sets of the invention are useful for detecting kappa or
XX      lambda-immunoglobulin light chain mRNA or corresponding heteronuclear
XX      RNA, CMV (cytomegalovirus) immediate early RNA, EBV (Epstein-Barr virus)
XX      early RNA 1 and RNA 2, and human Alu repetitive satellite genomic
XX      sequences. The invention is a useful generic sequence for incorporation
XX      into oligonucleotide probes for detecting gene-specific sequences within
XX      cells or tissue samples in situ hybridisation analysis and for
XX      attaching a label to immunoglobulins or other proteins for detecting
XX      haptens and antigens in immunohistochemical analyses. The present nucleic
XX      acid sequence represents one of a collection (ABK70376-ABK70501) of
XX      oligonucleotide probes that were used in the invention for detecting or
XX      localising a plurality nucleic acid target gene or antigen within a cell
XX      or tissue sample
XX
SQ      Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match      1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db      30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 109
ABS53961/c
ID      ABS53961 standard; DNA; 30 BP.
XX
XX      ABS53961;
AC

Db      30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 110
ADU07154/c
ID      ADU07154 standard; DNA; 30 BP.
XX
XX      ADU07154;
XX
XX      27-JAN-2005 (first entry)
XX
XX      Oligonucleotide #2 synthesised on a solid support.
XX
XX      3'-amino oligonucleotide; solid support; benzene derivative;
XX      solid phase oligonucleotide synthesis; SPDS; controlled pore glass; CPG;

```

```

XX      26-NOV-2002 (first entry)
XX
XX      Method of measuring nucleic acid related oligonucleotide dnt30mer.
XX
XX      Fluorescent intercalative dye; nucleic acid detection; gene diagnosis;
XX      clinical diagnostics; Stokes shift; ds.
XX
XX      Synthetic.
XX
XX      EPI223226-A2.
XX
XX      17-JUL-2002.
XX
XX      11-JAN-2002; 2002EP-00000723.
XX
XX      11-JAN-2001; 2001JP-00003432.
XX
XX      (TOYU ) TOSOH CORP.
XX
XX      Tokunaga T, Ishiguro T, Horie R;
XX
XX      WPI; 2002-645688/70.
XX
XX      Fluorescent dye or its salt, hydrate, solvate or stereoisomer for nucleic
XX      acid probe for measuring nucleic acid(s) containing specific nucleic acid
XX      sequence in sample, has specific formula.
XX
XX      Example 5; Page 33; 40pp; English.
XX
XX      The invention describes a novel fluorescent dye and method of detecting
XX      nucleic acid. The dye and method are useful for nucleic acid probes for
XX      measuring nucleic acid(s) containing a specific nucleic acid sequence in
XX      a sample, and for qualitative/quantitative assay of target RNA containing
XX      specific base sequence anticipated in gene mixture. The assay is useful
XX      in gene diagnosis and other areas of clinical diagnostics and in
XX      identification/quantification microorganisms in biological samples such
XX      as serum, plasma and urine, microbially contaminated samples from food,
XX      rooms, soil, rivers and sea. The fluorescent intercalative dye shows a
XX      large fluorescent enhancement upon intercalation into double-stranded
XX      nucleic acid, and shows a great difference between excitation and
XX      emission wavelengths (has a large Stokes shift) and does not have a
XX      fluorescent spectrum that overlaps with those of conventionally known
XX      fluorescent intercalation dyes. Viruses, microbial RNAs, specific
XX      sequences in one RNA, are detected or quantified in a short time, hence
XX      the detection method is applicable to clinical diagnosis which requires
XX      high reliability. Amplification and extraction efficiencies of the target
XX      nucleic acid, are checked. This sequence represents a synthetic DNA used
XX      as the target in an assay to detect double stranded DNA
XX
SQ      Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match      1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db      30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 110
ADU07154/c
ID      ADU07154 standard; DNA; 30 BP.
XX
XX      ADU07154;
XX
XX      27-JAN-2005 (first entry)
XX
XX      Oligonucleotide #2 synthesised on a solid support.
XX
XX      3'-amino oligonucleotide; solid support; benzene derivative;
XX      solid phase oligonucleotide synthesis; SPDS; controlled pore glass; CPG;

```

KW bi-fluorescent probe; ss.
XX Synthetic.
OS US2004220397-A1.
XX
PN 04-NOV-2004.
XX
PD 21-APR-2004; 2004US-00830484.
XX
PF 21-APR-2003; 2003US-0464269P.
XX
PR (PROL-) PROLIGO LLC.
XX
PA Leuck M, Wolter A;
XX
PI WPI; 2004-794500/78.
XX
XX Preparation of 3'-amino oligonucleotide derivatives, useful to synthesis
PT bi-fluorescent probes, comprises providing solid support compounds,
PT synthesis an oligonucleotide chain is assembled on the solid support,
PT cleavage and deprotection.
XX
PS Example 8; Page 16; 25pp; English.
XX
CC The invention relates to the preparation of 3'-amino oligonucleotide
CC derivatives. The method comprises providing solid support benzene
CC derivatives, synthesising an oligonucleotide pursuant to standard
CC techniques for solid phase oligonucleotide synthesis (SPOS) where the
CC oligonucleotide chain is assembled on the solid support, cleaving the
CC oligonucleotide from the solid support and deprotecting the
CC oligonucleotide completely except for the terminal protective group. The
CC solid phase is a derivatised controlled pore glass (CPG). The 3'-amino
CC oligonucleotides are useful in the synthesis of bi-fluorescent probes.
CC This process suppresses the undesired formation of unmodified 3'-OH
CC oligonucleotides through cyclic phosphate intermediates and reduces the
CC probability of errors resulting from the use of different reagents for
CC different sets of oligonucleotides. This sequence represents an
CC oligonucleotide synthesised in the examples of the present invention.
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db |||||||||||||||||||||||||||||||||||
30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 111
ADV98265/c
ID ADV98265 standard; DNA; 30 BP.
XX
AC ADV98265;
XX
DT 24-FEB-2005 (first entry)
XX
DE Microarray associated oligonucleotide SEQ ID NO 9.
XX
KW microarray; DNA detection; hybridization; ss.
OS Synthetic.
XX
PN KR2004076201-A.
XX
PD 31-AUG-2004.
XX
XX 04-FEB-2004; 2004KR-00007237.
XX
XX 24-FEB-2003; 2003KR-00006722.
XX

PA (KIMC/) KIM C M.
PA (PARK/) PARK H K.
XX
PI Jang HJ, Kim CM, Park HK;
XX
XX WPI; 2005-055129/06.
XX
PT Microarray comprising QC probes and method for fabricating the same.
XX
PS Example 2; SEQ ID NO 9; 17pp; Korean.
XX
CC The invention describes a microarray comprising QC probes and a method
CC for fabricating the microarray. The microarray comprising QC probes has
CC the complementary nucleotide sequence with that of a target gene or any
CC nucleotide sequence labeled with a fluorescence material which is
CC different from the fluorescence material labeled to the target gene,
CC wherein the fluorescence material is labeled at the 3'-terminal, 5'-
CC terminal or intermediate of the QC probes; a spacer is further contained
CC between the nucleotide sequence of the probes and fluorescence material;
CC the QC probes can be cDNA, oligonucleotides, peptides or proteins. The
CC method for fabricating the microarray comprising QC probes involves
CC fixing the QC probes or a mixture of QC probes and target probe on a
CC substrate, wherein the QC probes and target probe are fixed in a spot at
CC the same time. This sequence represents an oligonucleotide associated
CC with the microarray of the invention.
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db |||||||||||||||||||||||||||||||||||
30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 112
AED67969
ID AED67969 standard; DNA; 30 BP.
XX
AC AED67969;
XX
DT 12-JAN-2006 (first entry)
XX
DE Staphylococcus aureus Meca gene specific probe 1 SEQ ID: 25 #2.
XX
KW Analyte detection; DNA detection; protein detection; Meca gene; probe;
KW ss.
XX
OS Staphylococcus aureus.
XX
FH Key Location/Qualifiers
FT modified_base 1..30
FT /tag= a
FT /mod_base= OTHER
FT /note="OTHER= Linked to gold-S' where S' indicates a
FT connecting unit prepared via an epiandrosterone disulfide
FT group"
XX
PN US2005250094-A1.
XX
PD 10-NOV-2005.
XX
XX 22-NOV-2004; 2004US-00995051.
XX
XX 30-MAY-2003; 2003US-0474569P.
PR 29-AUG-2003; 2003US-0499034P.
PR 04-NOV-2003; 2003US-0517450P.
PR 03-MAY-2004; 2004US-0567874P.
PR 27-MAY-2004; 2004US-00854848.
XX
XX (NANO-) NANOSPHERE INC.
PA

```

XX PI Storhoff JJ, Lucas A, Muller UR, Bao YP, Senical M, Garimella V;
XX WPI; 2005-784662/80.
XX
XX PT Detecting target (e.g. nucleic acid, protein, lipid, bacterium) in
XX sample, comprises contacting sample with one or more types of
XX nanoparticle having target binding complements, and detecting any light
XX scattering complex formed.
XX
XX PS Example 25; SEQ ID NO 25; 70pp; English.
XX
XX CC The present invention provides a method for detecting the presence or
XX absence of a single target molecule or target analyte (e.g. nucleic acid,
XX protein, lipid, bacterium). The method involves contacting sample with
XX one or more types of nanoparticle having target binding complements and
XX detecting any light scattering complex formed. The nanoparticle probe
XX complexes comprise two or more probes bound to a specific target analyte.
XX The present sequence is a Staphylococcus aureus MecA gene specific probe.
XX This sequence is used in the preparation of nanoparticle-oligonucleotide
XX conjugate probes. Note: The present sequence is the SEQ ID NO: 25 shown
XX on page 25 in example 25 of the specification. This sequence differs from
XX the SEQ ID NO: 25 given in the sequence listing (see AED67954).
XX
XX SQ Sequence 30 BP; 30 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 30; DB 1; Length 30;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
XX |||||||||||||||||||||||||||||||||||||||
XX Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 30
XX
XX RESULT 113
XX AED67958
XX ID AED67958 standard; DNA; 30 BP.
XX
XX AC AED67958;
XX
XX DT 12-JAN-2006 (first entry)
XX
XX DE Methicillin resistant S. aureus MecA gene specific probe 1 SEQ ID: 29.
XX
XX KW Analyte detection; DNA detection; protein detection; MecA gene; probe;
XX ss.
XX
XX OS Staphylococcus aureus.
XX
XX PN US2005250094-A1.
XX
XX PD 10-NOV-2005.
XX
XX PF 22-NOV-2004; 2004US-00995051.
XX
XX PR 30-MAY-2003; 2003US-0474569P.
XX PR 29-AUG-2003; 2003US-0499034P.
XX PR 04-NOV-2003; 2003US-0517450P.
XX PR 03-MAY-2004; 2004US-0567874P.
XX PR 27-MAY-2004; 2004US-00854848.
XX
XX PA (NANO-) NANOSPHERE INC.
XX
XX PI Storhoff JJ, Lucas A, Muller UR, Bao YP, Senical M, Garimella V;
XX WPI; 2005-784662/80.
XX
XX PT Detecting target (e.g. nucleic acid, protein, lipid, bacterium) in
XX sample, comprises contacting sample with one or more types of
XX nanoparticle having target binding complements, and detecting any light
XX scattering complex formed.
XX

```

```

PS Example 25; SEQ ID NO 29; 70pp; English.
XX
XX CC The present invention provides a method for detecting the presence or
XX absence of a single target molecule or target analyte (e.g. nucleic acid,
XX protein, lipid, bacterium). The method involves contacting sample with
XX one or more types of nanoparticle having target binding complements and
XX detecting any light scattering complex formed. The nanoparticle probe
XX complexes comprise two or more probes bound to a specific target analyte.
XX The present sequence is a methicillin resistant Staphylococcus aureus
XX (MecA) gene specific probe. This sequence is used in the preparation
XX of nanoparticle-oligonucleotide conjugate probes. Note: This sequence is
XX incorrectly designated as SEQ ID NO: 25 in example 25 (page 25) of the
XX specification.
XX
XX SQ Sequence 30 BP; 30 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.1%; Score 30; DB 1; Length 30;
XX Best Local Similarity 100.0%; Pred. No. 1.9e+02;
XX Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
XX |||||||||||||||||||||||||||||||||||||||
XX Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 30
XX
XX RESULT 114
XX AEE86839/c
XX ID AEE86839 standard; DNA; 30 BP.
XX
XX AC AEE86839;
XX
XX DT 23-FEB-2006 (first entry)
XX
XX DE Novel solid phase-related oligonucleotide Oligo dT40-Cy3 #14.
XX
XX KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
XX OS Synthetic.
XX
XX PH Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Cy3"
XX
XX PN DE102004025746-A1.
XX
XX PD 15-DEC-2005.
XX
XX PF 26-MAY-2004; 2004DE-10025746.
XX
XX PR 26-MAY-2004; 2004DE-10025746.
XX
XX PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVXX GMBH.
XX
XX PI Cherkasov D, Hennig C, Baeuml E;
XX
XX DR WPI; 2006-040183/05.
XX
XX PT Parallel sequencing of nucleic acids by optical methods, by cyclic primer
XX -matrix extension, using a solid phase with reduced non-specific binding
XX of labeled components.
XX
XX PS Disclosure; Page 97; 144pp; German.
XX
XX CC This invention relates to a novel method for parallel sequence analysis
XX of nucleic acids (NA) by optical means using a novel solid phase (SP).
XX The SP is useful for multiple parallel sequencing of nucleic acids and
XX shows reduced non-specific binding of labeled or unlabeled nucleotides
XX and nucleic acids, so the background remains low even after prolonged and
XX repeated contact of the solid phase with high concentrations of labeled
XX

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```
CC reagents. The present sequence is that of an oligonucleotide which was
CC used in the development of the novel method of the invention.
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match          1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 115
AEE86831/c
ID AEE86831 standard; DNA; 30 BP.
XX
AC AEE86831;
XX
DT 23-FEB-2006 (first entry)
XX
DE Novel solid phase-related oligonucleotide Oligo-dT30-Cy3 #6.
XX
KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= Cy3"
XX
PN DE102004025746-A1.
XX
PD 15-DEC-2005.
XX
PF 26-MAY-2004; 2004DE-10025746.
XX
PR 26-MAY-2004; 2004DE-10025746.
XX
PA (CHER/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVXX GMBH.
XX
PI Cherkasov D, Hennig C, Baeuml E;
XX
PD WPI; 2006-040183/05.
XX
PF Parallel sequencing of nucleic acids by optical methods, by cyclic primer
PT -matrix extension, using a solid phase with reduced non-specific binding
PT of labeled components.
XX
PS Disclosure; Page 97; 144pp; German.
XX
CC This invention relates to a novel method for parallel sequence analysis
CC of nucleic acids (NA) by optical means using a novel solid phase (SP).
CC The SP is useful for multiple parallel sequencing of nucleic acids and
CC shows reduced non-specific binding of labeled or unlabeled nucleotides
CC and nucleic acids, so the background remains low even after prolonged and
CC repeated contact of the solid phase with high concentrations of labeled
CC reagents. The present sequence is that of an oligonucleotide which was
CC used in the development of the novel method of the invention.
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match          1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 117
AEE86849/c
ID AEE86849 standard; DNA; 30 BP.
XX
AC AEE86849;
XX
DT 23-FEB-2006 (first entry)
XX
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```
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 116
AEE86833/c
ID AEE86833 standard; DNA; 30 BP.
XX
AC AEE86833;
XX
DT 23-FEB-2006 (first entry)
XX
DE Novel solid phase-related oligonucleotide Oligo dT40-Biotin #8.
XX
KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 5'-terminal Biotin-TEG"
XX
PN DE102004025746-A1.
XX
PD 15-DEC-2005.
XX
PF 26-MAY-2004; 2004DE-10025746.
XX
PR 26-MAY-2004; 2004DE-10025746.
XX
PA (CHER/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVXX GMBH.
XX
PI Cherkasov D, Hennig C, Baeuml E;
XX
PD WPI; 2006-040183/05.
XX
PF Parallel sequencing of nucleic acids by optical methods, by cyclic primer
PT -matrix extension, using a solid phase with reduced non-specific binding
PT of labeled components.
XX
PS Disclosure; Page 97; 144pp; German.
XX
CC This invention relates to a novel method for parallel sequence analysis
CC of nucleic acids (NA) by optical means using a novel solid phase (SP).
CC The SP is useful for multiple parallel sequencing of nucleic acids and
CC shows reduced non-specific binding of labeled or unlabeled nucleotides
CC and nucleic acids, so the background remains low even after prolonged and
CC repeated contact of the solid phase with high concentrations of labeled
CC reagents. The present sequence is that of an oligonucleotide which was
CC used in the development of the novel method of the invention.
XX
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match          1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 117
AEE86849/c
ID AEE86849 standard; DNA; 30 BP.
XX
AC AEE86849;
XX
DT 23-FEB-2006 (first entry)
XX
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```

DE XX Novel solid phase-related oligonucleotide Oligo dT40-Biotin #7.
KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 1
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "5'-terminal Biotin-TEG"
XX PN DE102004025745-A1.
XX PD 15-DEC-2005.
XX PF 26-MAY-2004; 2004DE-10025745.
XX PR 26-MAY-2004; 2004DE-10025745.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX PA (CHER/) CHERKASOV D.
XX PI Cherkasov D, Hennig C;
XX DR WPI; 2006-040182/05.
XX XX
XX PF Surface of solid phase, useful for parallel, optical analysis of many
XX PT nucleic acids, has reduced non-specific binding of labeled components.
XX PR Disclosure; Page 62; 88pp; German.
XX CC This invention relates to a novel surface of a solid phase (SP), useful
XX CC in methods for parallel analysis of many individual nucleic acids (NA) by
XX CC optical methods. The novel SP is useful for multiple parallel sequencing
XX CC of nucleic acids and shows reduced non-specific binding of labeled or
XX CC unlabeled nucleotides and nucleic acids. The present sequence is that of
XX CC an oligonucleotide which was used in the development of the novel solid
XX CC phase of the invention.
XX SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db |||||||||||||||||||||||||||||||
30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 118
AEE86855/C
ID AEE86855 standard; DNA; 30 BP.
XX AC AEE86855;
XX DT 23-FEB-2006 (first entry)
XX DE Novel solid phase-related oligonucleotide Oligo dT40-Cy3 #13.
XX KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 1
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Cy3"
XX PN DE102004025745-A1.

```

```

XX PD 15-DEC-2005.
XX PF 26-MAY-2004; 2004DE-10025745.
XX PR 26-MAY-2004; 2004DE-10025745.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX PA (CHER/) CHERKASOV D.
XX PI Cherkasov D, Hennig C;
XX DR WPI; 2006-040182/05.
XX XX
XX PF Surface of solid phase, useful for parallel, optical analysis of many
XX PT nucleic acids, has reduced non-specific binding of labeled components.
XX PR Disclosure; Page 62; 88pp; German.
XX CC This invention relates to a novel surface of a solid phase (SP), useful
XX CC in methods for parallel analysis of many individual nucleic acids (NA) by
XX CC optical methods. The novel SP is useful for multiple parallel sequencing
XX CC of nucleic acids and shows reduced non-specific binding of labeled or
XX CC unlabeled nucleotides and nucleic acids. The present sequence is that of
XX CC an oligonucleotide which was used in the development of the novel solid
XX CC phase of the invention.
XX SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db |||||||||||||||||||||||||||||||
30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 119
AEE86847/C
ID AEE86847 standard; DNA; 30 BP.
XX AC AEE86847;
XX DT 23-FEB-2006 (first entry)
XX DE Novel solid phase-related oligonucleotide Oligo-dT30-Cy3 #5.
XX KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 1
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Cy3"
XX PN DE102004025745-A1.
XX PD 15-DEC-2005.
XX PF 26-MAY-2004; 2004DE-10025745.
XX PR 26-MAY-2004; 2004DE-10025745.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX PA (CHER/) CHERKASOV D.
XX PI Cherkasov D, Hennig C;
XX PN DE102004025745-A1.

```

DR WPI; 2006-040182/05.

XX Surface of solid phase, useful for parallel, optical analysis of many

PT nucleic acids, has reduced non-specific binding of labeled components.

XX

XX PS

XX Disclosure; Page 62; 88pp; German.

XX This invention relates to a novel surface of a solid phase (SP), useful

CC in methods for parallel analysis of many individual nucleic acids (NA) by

CC optical methods. The novel SP is useful for multiple parallel sequencing

CC of nucleic acids and shows reduced non-specific binding of labeled or

CC unlabeled nucleotides and nucleic acids. The present sequence is that of

CC an oligonucleotide which was used in the development of the novel solid

CC phase of the invention.

XX

SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;

Best Local Similarity 100.0%; Pred. No. 1.9e+02;

Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738

DB 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 120

AEF12156/c

ID AEF12156 standard; DNA; 30 BP.

AC AEF12156;

XX

XX 09-MAR-2006 (first entry)

DT

DE Oligonucleotide dT30-Cy3.

XX

XX DNA detection; DNA sequencing; primer; ss.

XX

OS Synthetic.

XX

XX Key Location/Qualifiers

FT modified_base 1 /*tag= a

FT /mod_base= OTHER

FT /note= "optionally labeled with Cy3 or Biotin-TEG"

XX

PN DE102004025744-A1.

XX

XX 29-DEC-2005.

XX

XX 26-MAY-2004; 2004DE-10025744.

XX

XX 26-MAY-2004; 2004DE-10025744.

XX

XX (CHER/) CHERKASOV D.

PA (HENW/) HENNIG C.

PA (GENO-) GENOVXX GMBH.

XX

XX Cherkasov D, Hennig C;

PI

XX

XX WPI; 2006-081126/09.

DR

XX Surface of a solid support, useful for multiple parallel analysis of

PT nucleic acids by optical methods, having low non-specific binding of

PT labeled components.

PT

XX Disclosure; Page 62; 88pp; German.

PS

XX This invention describes a novel solid support surface for parallel

CC analysis of many individual nucleic acids by optical methods. The

CC invention also describes; a) a solid phase in which the surface shows

CC reduced non-specific binding of labeled components; b) methods for

CC preparing the novel solid support and c) methods of parallel analysis of

CC many nucleic acid by optical methods, using the solid support. The

CC surface of the solid support is made of silica, glass, silicon dioxide or

CC Si-OH; is flat and has nucleic acid chains fixed to it, optionally

CC through a linker. The solid phase is preferably part of a device that

CC allows fluid exchange and it is permeable to light in the wavelength

CC regions 200-400; 200-2000 or 400-800 nm. An external layer of solid

CC support is removed, then the nucleic acid is coupled to it, optionally

CC after attachment of a linker layer. Alternatively, after removing the

CC external layer, nucleic acids are synthesized on the surface by cyclic

CC coupling, optionally after attachment of a linker, and in either case,

CC additional substances (specifically phosphate, sulfate or carboxy-

CC containing monomers or polymers) can be coupled to the surface, after

CC attachment or synthesis of nucleic acids. Only part of the surface is

CC removed, particularly by a chemical reaction with hydrofluoric acid or

CC sodium hydroxide, especially to remove a layer 1 nm to 100 micron thick,

CC particularly after removal of the surface layer, the surface is not dried

CC and all subsequent steps are done in a liquid phase. The nucleic acids

CC analyzed represent a single population or many different populations and

CC contains 5-50, 20-200 or 50-500 nucleotides. The linker is 1-50 nm long

CC and is e.g. a branched or linear polymer; (strept)avidin or a nucleic

CC acid. Parallel analysis uses components labeled with ribo-, deoxyribo- or

CC dideoxyribo-nucleoside triphosphates, in which the label is cleavable.

CC Particularly analysis involves cyclic sequencing and a preferred method

CC comprises: binding nucleic acid to the solid support, with formation of a

CC extensible primer-matrix complex; performing cyclic reactions and

CC reconstructing the nucleic acid sequence. The sequences being analyzed

CC contain 30-3000 nt, RNA or DNA, and the solid phase may carry nucleic

CC acid sequences that function as primers for the sequencing reaction;

CC alternatively the nucleic acid is fixed to the support and then

CC hybridized with a primer. The incorporated nucleotide includes a

CC reversible terminating group so that only one nucleotide can be

CC incorporated in each step. The surface is specifically used for multiple

CC parallel sequencing of nucleic acids. The surface shows reduced non-

CC specific binding of labeled and unlabeled nucleotides or nucleic acids,

CC so assay sensitivity is improved. This sequence represents an

CC oligonucleotide used to illustrate the method of the invention.

XX

SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;

Best Local Similarity 100.0%; Pred. No. 1.9e+02;

Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738

DB 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 121

AEF94776/c

ID AEF94776 standard; DNA; 30 BP.

XX

XX AEF94776;

XX

XX 20-APR-2006 (first entry)

DT

XX

DE Optical DNA analysis process-related oligonucleotide dT40-biotin.

XX

XX ss; dna detection; DNA sequencing; DNA amplification; oligo dT40-biot.

XX

XX Unidentified.

OS Synthetic.

XX

XX Key Location/Qualifiers

FT modified_base 1 /*tag= b

FT /mod_base= 5'-Biotin-TEG

FT

XX

XX DE102004025695-A1.

XX

XX 23-FEB-2006.

XX

XX 26-MAY-2004; 2004DE-10025695.

PF


```
XX PR 26-MAY-2004; 2004DE-10025695.
XX PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX PI Cherkasov D, Hennig C;
XX DR WPI; 2006-185819/20.
XX PT Optical fluorescent parallel process to analyse nucleic acid chains in
XX PT which a sample solid is bound with a primer-matrix complex.
XX PS Example 5; Page 66; 94pp; German.
XX CC This invention relates to a novel optical fluorescent process to analyse
XX CC nucleic acid chains. Using the method, a sample solid is bound with a
XX CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX CC are incorporated in the primer matrix by enzyme reaction, followed by
XX CC washing of the solid phase. The marked nucleotides are detected and their
XX CC co-ordinates logged and the signals removed. The marked nucleotides are
XX CC detected and their co-ordinates logged and the signals removed. The solid
XX CC phase is then washed and the sequence repeated as necessary. The Nucleic
XX CC acid chain sequence is then reconstructed using the signals. The process
XX CC is faster, more efficient and cheaper than prior art. Further claimed is
XX CC that the process is able to determine many sequences in parallel. The
XX CC present sequence is that of oligonucleotide dT40-biot which was used in
XX CC the development of the novel process of the invention.
XX SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 122
AEF94774/C
ID AEF94774 standard; DNA; 30 BP.
XX AC AEF94774;
XX DT 20-APR-2006 (first entry)
XX DE Optical DNA analysis process-related oligonucleotide dT30-Cy3.
XX KW ss; dna detection; DNA sequencing; DNA amplification; oligo dT30-Cy3.
XX OS Unidentified.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1 /*tag= b
FT /*mod_base= 5'-Cy3
XX DE102004025695-A1.
XX PN 23-FEB-2006.
XX PD 26-MAY-2004; 2004DE-10025695.
XX PF 26-MAY-2004; 2004DE-10025695.
XX PR (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX PI Cherkasov D, Hennig C;
XX DR WPI; 2006-185819/20.
XX PT Optical fluorescent parallel process to analyse nucleic acid chains in
XX PT which a sample solid is bound with a primer-matrix complex.
XX XX
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PI Cherkasov D, Hennig C;
XX DR WPI; 2006-185819/20.
XX PT Optical fluorescent parallel process to analyse nucleic acid chains in
XX PT which a sample solid is bound with a primer-matrix complex.
XX PS Example 5; Page 66; 94pp; German.
XX CC This invention relates to a novel optical fluorescent process to analyse
XX CC nucleic acid chains. Using the method, a sample solid is bound with a
XX CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX CC are incorporated in the primer matrix by enzyme reaction, followed by
XX CC washing of the solid phase. The marked nucleotides are detected and their
XX CC co-ordinates logged and the signals removed. The marked nucleotides are
XX CC detected and their co-ordinates logged and the signals removed. The solid
XX CC phase is then washed and the sequence repeated as necessary. The Nucleic
XX CC acid chain sequence is then reconstructed using the signals. The process
XX CC is faster, more efficient and cheaper than prior art. Further claimed is
XX CC that the process is able to determine many sequences in parallel. The
XX CC present sequence is that of oligonucleotide dT30-Cy3 which was used in
XX CC the development of the novel process of the invention.
XX SQ Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 123
AEF94782/C
ID AEF94782 standard; DNA; 30 BP.
XX AC AEF94782;
XX DT 20-APR-2006 (first entry)
XX DE Optical DNA analysis process-related oligonucleotide dT40-Cy3.
XX KW ss; dna detection; DNA sequencing; DNA amplification; oligo dT40-Cy3.
XX OS Unidentified.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1 /*tag= b
FT /*mod_base= 5'-Cy3
XX DE102004025695-A1.
XX PN 23-FEB-2006.
XX PD 26-MAY-2004; 2004DE-10025695.
XX PF 26-MAY-2004; 2004DE-10025695.
XX PR (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX PI Cherkasov D, Hennig C;
XX DR WPI; 2006-185819/20.
XX PT Optical fluorescent parallel process to analyse nucleic acid chains in
XX PT which a sample solid is bound with a primer-matrix complex.
XX XX
```

PS Example 2; Page 67; 94pp; German.

XX This invention relates to a novel optical fluorescent process to analyse

CC nucleic acid chains. Using the method, a sample solid is bound with a

CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides

CC are incorporated in the primer matrix by enzyme reaction, followed by

CC washing of the solid phase. The marked nucleotides are detected and their

CC co-ordinates logged and the signals removed. The marked nucleotides are

CC detected and their co-ordinates logged and the signals removed. The solid

CC phase is then washed and the sequence repeated as necessary. The Nucleic

CC acid chain sequence is then reconstructed using the signals. The process

CC is faster, more efficient and cheaper than prior art. Further claimed is

CC that the process is able to determine many sequences in parallel. The

CC present sequence is that of oligonucleotide dT40-Cy3 which was used in

CC the development of the novel process of the invention.

XX Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

SQ

Query Match 1.1%; Score 30; DB 1; Length 30;

Best Local Similarity 100.0%; Pred. No. 1.9e+02;

Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738

DB 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 125

AEF94758/c

ID AEF94758 standard; DNA; 30 BP.

XX AEF94758;

AC AEF94758;

XX 20-APR-2006 (first entry)

DE Optical DNA analysis process-related oligonucleotide dT40-biotin.

XX ss; dna detection; DNA sequencing; DNA amplification; oligo dT40-biot.

OS Unidentified.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1

FT /*tag= b

FT /mod_base= 5'-Biotin-TEG

XX DE102004025694-A1.

XX 23-FEB-2006.

XX 26-MAY-2004; 2004DE-10025694.

XX 26-MAY-2004; 2004DE-10025694.

XX (CHER/) CHERKASOV D.

XX (HENN/) HENNIG C.

XX (GENO-) GENOVORX GMBH.

XX Cherkasov D, Hennig C;

XX WPI; 2006-185818/20.

XX Optical fluorescent ultra-high parallel process to analyse nucleic acid

XX chains in which a sample solid is bound with a primer-matrix complex.

XX Example 5; Page 67; 95pp; German.

XX This invention relates to a novel optical fluorescent process to analyse

XX nucleic acid chains. Using the method, a sample solid is bound with a

XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides

XX are incorporated in the primer matrix by enzyme reaction, followed by

XX washing of the solid phase. The marked nucleotides are detected and their

XX co-ordinates logged and the signals removed. The marked nucleotides are

XX detected and their co-ordinates logged and the signals removed. The solid

XX phase is then washed and the sequence repeated as necessary. The Nucleic

XX acid chain sequence is then reconstructed using the signals. The process

XX is faster, more efficient and cheaper than prior art. The present

XX sequence is that of oligonucleotide dT40-biot which was used in the

XX development of the novel process of the invention.

PS Example 2; Page 67; 94pp; German.

XX This invention relates to a novel optical fluorescent process to analyse

CC nucleic acid chains. Using the method, a sample solid is bound with a

CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides

CC are incorporated in the primer matrix by enzyme reaction, followed by

CC washing of the solid phase. The marked nucleotides are detected and their

CC co-ordinates logged and the signals removed. The marked nucleotides are

CC detected and their co-ordinates logged and the signals removed. The solid

CC phase is then washed and the sequence repeated as necessary. The Nucleic

CC acid chain sequence is then reconstructed using the signals. The process

CC is faster, more efficient and cheaper than prior art. Further claimed is

CC that the process is able to determine many sequences in parallel. The

CC present sequence is that of oligonucleotide dT40-Cy3 which was used in

CC the development of the novel process of the invention.

XX Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;

SQ

Query Match 1.1%; Score 30; DB 1; Length 30;

Best Local Similarity 100.0%; Pred. No. 1.9e+02;

Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738

DB 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 124

AEF94758/c

ID AEF94758 standard; DNA; 30 BP.

XX AEF94758;

AC AEF94758;

XX 20-APR-2006 (first entry)

DE Optical DNA analysis process-related oligonucleotide dT30-Cy3.

XX ss; dna detection; DNA sequencing; DNA amplification; oligo dT30-Cy3.

OS Unidentified.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1

FT /*tag= b

FT /mod_base= 5'-Cy3

XX DE102004025694-A1.

XX 23-FEB-2006.

XX 26-MAY-2004; 2004DE-10025694.

XX 26-MAY-2004; 2004DE-10025694.

XX (CHER/) CHERKASOV D.

XX (HENN/) HENNIG C.

XX (GENO-) GENOVORX GMBH.

XX Cherkasov D, Hennig C;

XX WPI; 2006-185818/20.

XX Optical fluorescent ultra-high parallel process to analyse nucleic acid

XX chains in which a sample solid is bound with a primer-matrix complex.

XX Example 5; Page 67; 95pp; German.

XX This invention relates to a novel optical fluorescent process to analyse

XX nucleic acid chains. Using the method, a sample solid is bound with a

XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides

XX are incorporated in the primer matrix by enzyme reaction, followed by

XX washing of the solid phase. The marked nucleotides are detected and their

```
SQ Sequence 30 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db |||||
30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 126
AEF94766/c
ID AEF94766 standard; DNA; 30 BP.
XX
AC AEF94766;
XX
XX
XX 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide dT40-Cy3.
XX
XX ss; dna detection; DNA sequencing; DNA amplification; oligo dT40-Cy3.
XX
XX Unidentified.
XX OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1 /*tag= b
FT /mod_base= 5'-Cy3
FT
XX
XX DE102004025694-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025694.
XX
XX 26-MAY-2004; 2004DE-10025694.
XX
XX (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVORX GMBH.
XX
XX Cherkasov D, Hennig C;
XX PI
XX WPI; 2006-185818/20.
XX
XX Ultra-high parallel process to analyse nucleic acid chains in
XX which a sample solid is bound with a primer-matrix complex.
XX
XX Example 2; Page 68; 95pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. The present
XX sequence is that of oligonucleotide dT40-Cy3 which was used in the
XX development of the novel process of the invention.
XX
XX Sequence 30 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db |||||
30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 127
AEF94719/c
ID AEF94719 standard; DNA; 30 BP.
XX
AC AEF94719;
XX
XX
XX 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide dT30-Cy3.
XX
XX ss; dna detection; DNA sequencing; DNA amplification; oligo dT30-Cy3.
XX
XX Unidentified.
XX OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1 /*tag= b
FT /mod_base= 5'-Cy3
FT
XX
XX DE102004025696-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVORX GMBH.
XX
XX Cherkasov D, Hennig C, Baeuml E;
XX PI
XX WPI; 2006-185820/20.
XX
XX Ultra-high parallel analysis process to analyse nucleic acid chains in
XX which a sample solid is bound and substrate material.
XX
XX Example 5; Page 95; 141pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. Further claimed is
XX that the process is able to determine many sequences in parallel. The
XX present sequence is that of oligonucleotide dT30-Cy3 which was used in
XX the development of the novel process of the invention.
XX
XX Sequence 30 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db |||||
30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 128
AEF94721/c
ID AEF94721 standard; DNA; 30 BP.
XX
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Tue Nov 7 10:41:34 2006

```
AC AEF94721;
XX
XX
DT 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide dT40-biotin.
XX
XX ss; dna detection; DNA sequencing; DNA amplification; oligo dT40-biot.
XX
XX Unidentified.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= b
FT /mod_base= 5'-Biotin-TEG
FT
XX
XX DE102004025696-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX (CHER/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVOXX GMBH.
XX
XX Cherkasov D, Hennig C, Baeuml E;
XX
XX WPI; 2006-185820/20.
XX
XX Ultra-high parallel analysis process to analyse nucleic acid chains in
XX PT which a sample solid is bound and substrate material.
XX
XX Example 5; Page 95; 141pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX CC nucleic acid chains. Using the method, a sample solid is bound with a
XX CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX CC are incorporated in the primer matrix by enzyme reaction, followed by
XX CC washing of the solid phase. The marked nucleotides are detected and their
XX CC co-ordinates logged and the signals removed. The marked nucleotides are
XX CC detected and their co-ordinates logged and the signals removed. The solid
XX CC phase is then washed and the sequence repeated as necessary. The Nucleic
XX CC acid chain sequence is then reconstructed using the signals. The process
XX CC is faster, more efficient and cheaper than prior art. Further claimed is
XX CC that the process is able to determine many sequences in parallel. The
XX CC present sequence is that of oligonucleotide dT40-biot which was used in
XX CC the development of the novel process of the invention.
XX
XX Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 129
AEF94721/c
ID AEF94727 standard; DNA; 30 BP.
XX
XX AEF94727;
XX
DT 20-APR-2006 (first entry)
XX
XX Optical DNA analysis process-related oligonucleotide dT40-Cy3.
DE
XX ss; dna detection; DNA sequencing; DNA amplification; oligo dT40-Cy3.
KW
```

```
XX Unidentified.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= b
FT /mod_base= 5'-Cy3
FT
XX
XX DE102004025696-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX (CHER/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVOXX GMBH.
XX
XX Cherkasov D, Hennig C, Baeuml E;
XX
XX WPI; 2006-185820/20.
XX
XX Ultra-high parallel analysis process to analyse nucleic acid chains in
XX PT which a sample solid is bound and substrate material.
XX
XX Example 2; Page 95; 141pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX CC nucleic acid chains. Using the method, a sample solid is bound with a
XX CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX CC are incorporated in the primer matrix by enzyme reaction, followed by
XX CC washing of the solid phase. The marked nucleotides are detected and their
XX CC co-ordinates logged and the signals removed. The marked nucleotides are
XX CC detected and their co-ordinates logged and the signals removed. The solid
XX CC phase is then washed and the sequence repeated as necessary. The Nucleic
XX CC acid chain sequence is then reconstructed using the signals. The process
XX CC is faster, more efficient and cheaper than prior art. Further claimed is
XX CC that the process is able to determine many sequences in parallel. The
XX CC present sequence is that of oligonucleotide dT40-Cy3 which was used in
XX CC the development of the novel process of the invention.
XX
XX Sequence 30 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 0 Other;
SQ
Query Match 1.1%; Score 30; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
Db 30 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 130
AAx88521/c
ID AAX88521 standard; DNA; 33 BP.
XX
XX AAX88521;
XX
DT 13-SEP-1999 (first entry)
XX
XX Conus stercusmuscarum contryphan PCR primer DHOG 496.
XX
XX Contryphan; leu-tryphan; anticonvulsant; neuroprotective; venom;
KW cone snail; neurodegenerative disorder; epilepsy; neurotoxic injury;
KW hypoxia; anoxia; ischaemia; stroke; cerebrovascular accident;
KW brain trauma; spinal chord trauma; myocardial infarct; physical trauma;
KW drowning; suffocation; perinatal asphyxia; hypoglycaemia; migraine;
KW senile dementia; Alzheimer's disease; amyotrophic lateral sclerosis;
KW Parkinson's disease; Huntington's disease; Down's syndrome; PCR primer;
KW Korsakoff's disease; schizophrenia; neuronal damage; seizure; ss.
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XX OS Synthetic.
XX OS Conus stercusmuscarum.
XX PN WO9933865-A1.
XX PD 08-JUL-1999.
XX PF 16-DEC-1998; 98WO-US026789.
XX PR 24-DEC-1997; 97US-0068737P.
XX PR 16-APR-1998; 98US-00061026.
XX PA (UTAH ) UNIV UTAH RES FOUND.
XX PA
XX PI Jacobsen R, Jimenez E, Cruz LJ, Olivera BM, Gray WR, Grilley M;
XX PI Watkins M, Hillyard DR;
XX PI WPI; 1999-419087/35.
XX DR
XX DR
XX FT New pure contryphan peptides.
XX PS
XX PS Example 3; Page 20; 48pp; English.
XX CC
XX CC The present sequence represents a PCR primer for a contryphan
XX CC peptide sequence. Contryphan peptides are found in the venom of cone
XX CC snails. The contryphan peptides are useful as anticonvulsant agents, as
XX CC neuroprotective agents, for managing pain, and for treating
XX CC neurodegenerative disorders, especially those resulting from an
XX CC overstimulation of excitatory amino acid receptors. The contryphan are
XX CC useful for the treatment and alleviation of epilepsy and as a general
XX CC anticonvulsant agent. The contryphan are also useful to reduce
XX CC neurotoxic injury associated with conditions of hypoxia, anoxia, or
XX CC ischaemia which typically follows stroke, cerebrovascular accident, brain
XX CC or spinal chord trauma, myocardial infarct, physical trauma, drownings,
XX CC suffocation, perinatal asphyxia, or hypoglycaemic events. The contryphan
XX CC are further useful for the treatment of Alzheimer's disease, senile
XX CC dementia, amyotrophic lateral sclerosis, Parkinson's disease,
XX CC Huntington's disease, Down's syndrome, Korsakoff's disease,
XX CC schizophrenia, AIDS dementia, multi-infarct dementia, and neuronal damage
XX CC associated with uncontrolled seizures. The contryphan are further useful
XX CC in controlling pain and are effective in the treatment of migraines. They
XX CC can be used prophylactically or to relieve the symptoms associated with a
XX CC migraine episode
XX CC
XX SQ Sequence 33 BP; 0 A; 1 C; 2 G; 30 T; 0 U; 0 Other;

Query Match 1.1%; Score 30; DB 1; Length 33;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 30; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2738
   |||||||
Db 33 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 4

RESULT 131
ADL33740/c
ID ADL33740 standard; DNA; 35 BP.
XX AC
XX AC ADL33740;
XX DT
XX DT 03-JUN-2004 (first entry)
XX DE
XX DE LNA capture probe #3.
XX KW Detection; isolation; locked nucleic acid; LNA; probe; ss.
XX OS Synthetic.
XX OS
XX FT Key Location/Qualifiers
XX FT modified_base 1..15
XX FT /*tag= b

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FT FT /mod_base= OTHER
FT FT /note= "10-mer deoxy-thymine and 5-mer non-base (t10-
FT FT NB5)"
FT FT 1
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "5' AQ2, where AQ is anthraquinone"
FT FT 16..35
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "Optionally LNA nucleotides"
XX XX
XX PN WO2004020575-A2.
XX XX
XX PD 11-MAR-2004.
XX PF
XX PF 20-JUN-2003; 2003WO-IB006354.
XX PR
XX PR 24-JUN-2002; 2002US-0390928P.
XX XX
XX XX (EXIQ-) EXIQON AS.
XX XX
XX XX Kauppinen S, Jacobsen N;
XX XX
XX DR WPI; 2004-315512/29.
XX CC
XX CC Detecting and/or isolating nucleic acid molecule having homopolymeric
XX CC sequence or repetitive element or conserved nucleotide sequence involves
XX CC treating sample containing nucleic acid compounds with locked nucleic
XX CC acid oligonucleotide.
XX PS
XX PS Claim 23; Page 67; 104pp; English.
XX CC
XX CC The present invention relates to a method (M1) for detecting and/or
XX CC isolating a nucleic acid having a homopolymeric sequence or repetitive
XX CC element or conserved nucleotide sequence. (M1) comprises treating a
XX CC sample containing nucleic acid compounds with an locked nucleic acid
XX CC (LNA) oligonucleotide (LO) to thereby detect and/or isolate a nucleic
XX CC acid having the homopolymeric sequence or repetitive element or conserved
XX CC nucleotide sequence. (M1) is useful for detecting and isolating nucleic
XX CC acids released from a lysed complex biological mixture comprising nucleic
XX CC acids. The present sequence is a LNA capture probe, used to illustrate
XX CC the invention.
XX SQ Sequence 35 BP; 0 A; 0 C; 0 G; 30 T; 0 U; 5 Other;

Query Match 1.1%; Score 30; DB 1; Length 35;
Best Local Similarity 85.7%; Pred. No. 2.1e+02;
Matches 30; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2743
   |||||||
Db 35 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 132
AAQ05003/c
ID AAQ05003 standard; DNA; 29 BP.
XX AC
XX AC AAQ05003;
XX DT
XX DT 25-MAR-2003 (revised)
XX DT 31-OCT-1990 (first entry)
XX DE
XX DE Sequence binding to and inhibiting the GSTpi gene.
XX KW C-myc; cancer; HIV-1; AIDS; collagenase; Alzheimers disease; BGF;
XX KW epidermal growth factor; GSTpi; HMGCoA; thalassemia;
XX KW Herpes simplex virus; nerve growth factor receptor; globin; ss.
XX OS
XX OS Synthetic.
XX XX
XX PN EP375408-A.

```

```

XX PD 27-JUN-1990.
XX PF 20-DEC-1989; 89BP-00313391.
XX PR 20-DEC-1988; 88US-00287359.
XX PA (BAYU ) BAYLOR COLLEGE MEDICINE.
XX PI (HOGA/) HOGAN M E.
XX PI Hogan ME, Kessler DJ;
XX PR WPI; 1990-195509/26.
XX PT Synthetic oligo-nucleotide(s) which bind target duplex DNA - forming co-
XX PT linear triplex to control transcription process in gene-specific fashion.
XX PS Claim 39; Page 30; 40pp; English.
XX CC Sequence forms triplex with the double stranded target sequence with G
CC binding to G-C and T to A-T. The strand runs 3' to 5' in an antiparallel
CC orientation and when targeted to a specific sequence will deactivate it.
CC This allows for growth inhibition in cancerous cells; manipulation of
CC cellular structural protein content; inhibition of IL-2 chain receptor;
CC disbursing plaque formation in Alzheimer's disease; inhibiting EGF gene;
CC modulating cholesterol synthesis through the HMGCoA gene; suppressing NF-
CC gene expression; arresting HSV-I replication and suppressing Beta- globin
CC expression in thalassaemia and sickle cell anaemia patients. (Updated on
CC 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PA
CC field.)
XX SQ Sequence 29 BP; 0 A; 0 C; 0 G; 29 T; 0 U; 0 Other;

Query Match 1.1%; Score 29; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
Db 29 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 133
AD081147/c
ID AD081147 standard; DNA; 29 BP.
XX AC AD081147;
XX DT 29-JUL-2004 (first entry)
XX DE Prion protein polymorphic microsatellite marker consensus sequence #25.
XX KW gene typing; polymorphic microsatellite loci; PML;
XX KW disease predisposition; microsatellite marker; prion disease;
XX KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
XX KW milk protein; hormone; transcription factor; pT7-blue-vector; sheep;
XX KW microsatellite; ds.
XX OS Synthetic.
XX PN DE10236711-A1.
XX PD 26-FEB-2004.
XX PF 09-AUG-2002; 2002DE-01036711.
XX PR 09-AUG-2002; 2002DE-01036711.
XX PA (UYHO-) UNIV HOHENHEIM.
XX PA Geldermann H, Preuss S, Han Y;
XX PI
XX PF WPI; 2004-215730/21.
DR

```

```

XX PT Typing genes that contain polymorphic microsatellite loci, useful for
XX PT identifying predisposition to disease, by amplification and determining
XX PT length of amplicons.
XX PS Claim 9; Page 50; 64pp; German.
XX CC The invention describes a method of typing (M1) a gene (I) that has one
XX CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
XX CC amplification of at least one DNA region of (I) that includes PML, using
XX CC as template a DNA sample containing at least one segment of (I); and
XX CC determining the length of the resulting amplicon(s). Also described are:
XX CC a method of determining (M2) microsatellite markers (MM) for
XX CC predisposition to a disease, associated with a gene that includes one or
XX CC more PML; and prediagnosis (M3) of diseases associated with gene that
XX CC include PML. The method is used to identify microsatellite markers, in a
XX CC disease-related gene, that are associated with a predisposition to
XX CC diseases and for prediagnosis of such diseases, especially prion diseases
XX CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
XX CC metabolic diseases; also to type genes that encode milk proteins,
XX CC hormones or transcription factors. The method is simpler, quicker and
XX CC particularly less expensive than known methods based on sequencing. This
XX CC sequence represents a prion protein polymorphic microsatellite marker
XX CC consensus sequence.
XX SQ Sequence 29 BP; 0 A; 0 C; 0 G; 29 T; 0 U; 0 Other;

Query Match 1.1%; Score 29; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
Db 29 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 134
AD519107/c
ID AD519107 standard; DNA; 29 BP.
XX AC AD519107;
XX DT 30-DEC-2004 (first entry)
XX DE Multisignal labeling reagent associated oligonucleotide seqid 2.
XX KW labeling molecule; solubility; multisignal labeling reagent; ss;
XX KW DNA-RNA hybrid.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT misc_RNA 1
XX FT /tag= a
XX FT /note= "Fluorescein labeled"
XX FT misc_RNA 8
XX FT /tag= b
XX FT /note= "Fluorescein labeled"
XX FT misc_RNA 15
XX FT /tag= c
XX FT /note= "Fluorescein labeled"
XX FT misc_RNA 22
XX FT /tag= d
XX FT /note= "Fluorescein labeled"
XX FT misc_RNA 29
XX FT /tag= e
XX FT /note= "Fluorescein labeled, 3' amine"
XX PN US2004198971-A1.
XX PD 07-OCT-2004.
XX PF 03-APR-2003; 2003US-00407818.
DR

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XX PR 03-APR-2003; 2003US-00407818.
XX PA (RABB/) RABBANI E.
XX PA (STAV/) STAVRIANPOULOS J G.
XX PA (DONE/) DONEGAN J J.
XX PA
XX PI Rabbani E, Stavrianopoulos JG, Donegan JJ;
XX DR WPI; 2004-727850/71.
XX XX
XX PT Composition of multi signal labeling reagents, useful for detecting or
XX PT quantifying analyte in specimen, has oligomer/polymer having labeled
XX PT moieties, reactive groups and charged groups linked to oligomer/polymer.
XX PS Example 6; SEQ ID NO 2; 20pp; English.
XX XX
XX CC The invention describes a composition (I) of matter comprising an
XX CC oligomer or polymer having two or more labeled groups, where the label or
XX CC labels are chemically linked to the oligomer or polymer, one or more
XX CC reactive groups, and one or more charged groups where the charged groups
XX CC are covalently linked to the oligomer or polymer or comprise part of the
XX CC backbone of the oligomer or polymer, or any of their combination. Also
XX CC described are: a composition (II) comprising a target molecule that has
XX CC been labeled using (I); and a composition (III) prepared by a target
XX CC labeling process comprising (i) providing a target for labeling, and a
XX CC labeling reagent having the formula (F1) or (F2), (ii) reacting the
XX CC target and the labeling reagent to form the composition having the
XX CC formula (F3) or (F4). (I) is useful for labeling a target molecule;
XX CC detecting or quantifying an analyte in a specimen; and detecting or
XX CC quantifying an analyte in a specimen. (II) or (III) is useful for
XX CC detecting or quantifying an analyte, which involves providing (II) or
XX CC (III), where the target is an analyte specific moiety, contacting the
XX CC (II) or (III) with a specimen suspected of containing the analyte, and
XX CC measuring the amount of (II) or (III) bound to analytes in the specimen
XX CC to detect or quantify the analyte. (I) detects or quantifies analyte with
XX CC high sensitivity. In (I), the multiple labeled groups increases the
XX CC amount of signal that is added to the analyte specific moiety, the
XX CC presence of reactive groups enables attachment of the multiple labeled
XX CC groups to a desirable target and the presence of charged group increases
XX CC solubility. This sequence represents a multisignal labeling reagent
XX CC associate oligonucleotide.
XX SQ Sequence 29 BP; 0 A; 0 C; 0 G; 0 G; 24 T; 5 U; 0 Other;

Query Match 1.1%; Score 29; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
Db 29 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 135
ADU07155/c
ID ADU07155 standard; DNA; 29 BP.
XX AC
XX ADU07155;
XX DT
XX 27-JAN-2005 (first entry)
XX DE
XX 3'-amino oligonucleotide #4 synthesised on a solid support.
XX KW
XX 3'-amino oligonucleotide; solid support; benzene derivative;
XX KW solid phase oligonucleotide synthesis; SPOS; controlled pore glass; CPG;
XX KW bi-fluorescent probe; ss.
XX OS Synthetic.
XX XX
XX PH Key Location/Qualifiers
XX FT modified_base 29 /*tag= a

/modified_base= OTHER
/modified by NH2"
US2004220397-A1.
04-NOV-2004.
21-APR-2004; 2004US-00830484.
21-APR-2003; 2003US-0464269P.
XX (PROL-) PROLIGO LLC.
XX Leuck M, Wolter A;
XX WPI; 2004-794500/78.
XX XX
XX PT Preparation of 3'-amino oligonucleotide derivatives, useful to synthesis
XX PT bi-fluorescent probes, comprises providing solid support compounds,
XX PT synthesis an oligonucleotide chain is assembled on the solid support,
XX PT cleavage and deprotection.
XX PS Example 8; Page 16; 25pp; English.
XX CC The invention relates to the preparation of 3'-amino oligonucleotide
XX CC derivatives. The method comprises providing solid support benzene
XX CC derivatives, synthesising an oligonucleotide pursuant to standard
XX CC techniques for solid phase oligonucleotide synthesis (SPOS) where the
XX CC oligonucleotide chain is assembled on the solid support, cleaving the
XX CC oligonucleotide from the solid support and deprotecting the
XX CC oligonucleotide completely except for the terminal protective group. The
XX CC solid phase is a derivatised controlled pore glass (CPG). The 3'-amino
XX CC oligonucleotides are useful in the synthesis of bi-fluorescent probes.
XX CC This process suppresses the undesired formation of unmodified 3'-OH
XX CC oligonucleotides through cyclic phosphate intermediates and reduces the
XX CC probability of errors resulting from the use of different reagents for
XX CC different sets of oligonucleotides. This sequence represents an
XX CC oligonucleotide synthesised in the examples of the present invention.
XX SQ Sequence 29 BP; 0 A; 0 C; 0 G; 29 T; 0 U; 0 Other;

Query Match 1.1%; Score 29; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
Db 29 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 136
ADH70631/c
ID ADH70631 standard; DNA; 33 BP.
XX AC
XX ADH70631;
XX DT
XX 25-MAR-2004 (first entry)
XX DE
XX Human Vbeta gene repeat sequence #421.
XX KW
XX human; T-cell associated disease; Vbeta; autoimmune disease;
XX KW degenerative nervous system disease; graft versus host disease;
XX KW hypersensitivity disease; infectious disease; neoplastic disease;
XX KW Addison's disease; atrophic gastritis;
XX KW degenerative nervous system disease; multiple sclerosis;
XX KW Alzheimer's disease; hypersensitivity disease; type I hypersensitivity;
XX KW allergy; type II hypersensitivity; Goodpasture's syndrome;
XX KW type IV hypersensitivity; leprosy; infectious disease; viral infection;
XX KW HIV; fungal infection; Candida; parasitic infection; schistosme;
XX KW filaria; bacterial infection; Mycobacterium; lymphoma; cancer; brain cancer;
XX KW lymphoproliferative disease; leukaemia; lymphoma; cancer; breast cancer; ds.
XX XX

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OS Homo sapiens.
XX US2002150891-A1.
XX
XX
XX
XX
XX 17-OCT-2002.
XX
XX 05-MAR-1999; 99US-00263959.
XX
XX 19-SEP-1994; 94US-00309335.
XX 19-SEP-1995; 95US-00531241.
XX
XX (HOOD/) HOOD L E.
XX (ROWE/) ROWEN L.
XX
XX Hood LE, Rowen L;
XX
XX WPI; 2004-059052/06.
XX
XX Kit for diagnosing and treating T-cell associated diseases e.g.
XX autoimmune, degenerative nervous system and infectious disease, comprises
XX nucleic acid primers specifically priming and allowing amplification of a
XX Vbeta gene.
XX
XX Disclosure; SEQ ID NO 825; 164pp; English.
XX
XX The invention relates to a kit for diagnosing and treating T-cell
XX associated diseases which comprises a panel of nucleic acid primers
XX specifically priming and allowing amplification of each Vbeta gene,
XX VbetarNA or cDNA. The kit is useful for diagnosing organ transplant
XX rejection and diagnosing and treating T-cell associated diseases
XX including autoimmune diseases, degenerative nervous system diseases,
XX graft versus host disease, hypersensitivity diseases, infectious diseases
XX and neoplastic diseases. Autoimmune diseases include Addison's disease,
XX atrophic gastritis. Degenerative nervous system diseases include multiple
XX sclerosis and Alzheimer's disease. Hypersensitivity diseases include Type
XX I hypersensitivities such as contact with allergens that lead to
XX allergies, Type II hypersensitivities such as those present in
XX Goodpasture's syndrome and Type IV hypersensitivities such as those
XX manifested in leprosy. Infectious diseases include viral infections
XX caused by viruses such as HIV, fungal infections such as those caused by
XX the yeast genus Candida, parasitic infections such as those caused by
XX schistosomes, filaria and bacterial infections such as those caused by
XX Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
XX such as leukaemias, lymphomas and cancers such as cancer of the brain,
XX breast. The present sequence represents a Vbeta gene repeat sequence.
XX
XX Sequence 33 BP; 0 A; 0 C; 3 G; 30 T; 0 U; 0 Other;
XX
XX Query Match 1.0%; Score 28.8; DB 1; Length 33;
XX Best Local Similarity 93.8%; Pred. No. 2.4e+02;
XX Matches 30; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
Db 32 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAAACA 1

RESULT 137
ABQ80395
ID ABQ80395 standard; DNA; 33 BP.
XX
XX ABQ80395;
XX
XX 06-NOV-2003 (first entry)
XX
XX Probe APC 1-MUT.
XX
XX Probe; target; nanoparticle; detection; DNA sequencing; pathogen;
XX infection; screening; colour change; ss.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers

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```

FT modified_base 1
FT FT /*tag= a
FT FT /note= "Gold-S'-A"
XX
XX PN WO2003048769-A1.
XX
XX PD 12-JUN-2003.
XX
XX PF 27-NOV-2002; 2002WO-US038069.
XX
XX PR 30-NOV-2001; 2001US-0334644P.
XX
XX PA (NANO-) NANOSPHERE INC.
XX
XX XX Storhoff JJ, Fritz BM, Herrmann M;
XX
XX WPI; 2003-617993/58.
XX
XX Detecting target polynucleotide in a sample, by amplifying target,
XX hybridizing it to oligonucleotides bound to nanoparticles in nanoparticle
XX detection system, and determining amount of signal generated due to
XX binding.
XX
XX Example 1; Page 35; 74pp; English.
XX
XX The sequences given in ABQ80394-99 represent probes and targets which
XX were used in the method of the invention for detecting a target
XX polynucleotide in a sample. The method comprises amplifying the target,
XX hybridizing the target to oligonucleotides bound to nanoparticles in a
XX nanoparticle detection system, determining the amount of signal generated
XX as a result of binding, optionally repeating the above steps, and
XX detecting the presence of the target oligonucleotide by analysing for the
XX amount of signal produced after at least one amplification cycle. The
XX method is useful for detecting target polynucleotide in a sample, and for
XX determining the quantity of target polynucleotide in a sample. The method
XX is useful in research and analytical laboratories in DNA sequencing, in
XX the field to detect the presence of specific pathogens, in the doctor's
XX office for quick identification of an infection to assist in prescribing
XX a drug for treatment, and in homes and health centres for inexpensive
XX first-line screening. The method is based on observing colour change with
XX the naked eye, hence the method is cheap, fast, simple, robust, do not
XX require specialized or expensive equipment, and little or no
XX instrumentation is required
XX
XX Sequence 33 BP; 29 A; 1 C; 3 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 1.0%; Score 27.2; DB 1; Length 33;
XX Best Local Similarity 90.6%; Pred. No. 3.1e+02;
XX Matches 29; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
Db 1 AAAAAAAAAAAAAAAAAAGCAGAAAAAAAAA 32

RESULT 138
ADX44838
ID ADX44838 standard; DNA; 33 BP.
XX
XX ADX44838;
XX
XX 21-APR-2005 (first entry)
XX
XX Gold nanoparticle conjugated APC gene probe SEQ ID NO 2.
XX analyte detection; diagnosis; APC; probe; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX FT misc_feature 1
XX FT /*tag= a

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FT      /note= "5' conjugated to a gold nanoparticle via a
XX      connecting unit"
XX      WO2005008222-A2.
XX      27-JAN-2005.
XX      27-MAY-2004; 2004WO-US016656.
XX      30-MAY-2003; 2003US-0474569P.
XX      29-AUG-2003; 2003US-0499034P.
XX      04-NOV-2003; 2003US-0517450P.
XX      (NANO-) NANOSPHERE INC.
XX      Storhoff JJ, Lucas A, Mueller UR, Bao YP;
XX      WPI; 2005-152097/16.
XX      Detection of target analyte, e.g. nucleic acids or proteins, useful for
XX      diagnosis of genetic and infectious diseases, comprises forming light
XX      scattering complex, and illuminating complex to produce scattered light
XX      from complex.
XX      Example 1; SEQ ID NO 2; 70pp; English.
XX      The invention relates to the detection of a target analyte having at
XX      least two portions, which comprises forming a light scattering complex by
XX      contacting a sample containing specific binding complement with
XX      nanoparticle and with polysaccharide under conditions to allow binding of
XX      the specific complement to two or more portions of the target analyte and
XX      illuminating the light scattering complex under conditions to produce
XX      scattered light from the complex. The invention is useful for detecting
XX      target analyte, e.g. nucleic acids or proteins, useful for the diagnosis
XX      of genetic and infectious diseases. The present sequence represents an
XX      APC probe conjugated to a gold nanoparticle.
XX      SEQ Sequence 33 BP; 29 A; 1 C; 3 G; 0 T; 0 U; 0 Other;
XX      Query Match 1.0%; Score 27.2; DB 1; Length 33;
XX      Best Local Similarity 90.6%; Pred. No. 3.1e+02;
XX      Matches 29; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX      QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
XX      Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAGCAGAAAAAAAAA 32
XX      RESULT 139
XX      AED67931
XX      ID AED67931 standard; DNA; 33 BP.
XX      AC AED67931;
XX      DT 12-JAN-2006 (first entry)
XX      DE Human mutant APC 1 gene specific probe, APC 1-MUT.
XX      KW Analyte detection; DNA detection; protein detection; APC gene; probe; ss;
XX      KW mutant.
XX      OS Homo sapiens.
XX      OS Synthetic.
XX      FH Key Location/Qualifiers
XX      modified_base 1. .33
XX      FT /*tag= a
XX      FT /mod_base= OTHER
XX      FT /note= "OTHER= Linked to gold-s' where s' indicates a
XX      FT connecting unit prepared via an epiandrosterone disulfide
XX      FT group"
XX      US2005250094-A1.

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XX      10-NOV-2005.
XX      22-NOV-2004; 2004US-00995051.
XX      30-MAY-2003; 2003US-0474569P.
XX      29-AUG-2003; 2003US-0499034P.
XX      04-NOV-2003; 2003US-0517450P.
XX      03-MAY-2004; 2004US-0567874P.
XX      27-MAY-2004; 2004US-00854848.
XX      (NANO-) NANOSPHERE INC.
XX      Storhoff JJ, Lucas A, Muller UR, Bao YP, Senical M, Garimella V;
XX      WPI; 2005-784662/80.
XX      Detecting target (e.g. nucleic acid, protein, lipid, bacterium) in
XX      sample, comprises contacting sample with one or more types of
XX      nanoparticle having target binding complements, and detecting any light
XX      scattering complex formed.
XX      Example 1; SEQ ID NO 2; 70pp; English.
XX      The present invention provides a method for detecting the presence or
XX      absence of a single target molecule or target analyte (e.g. nucleic acid,
XX      protein, lipid, bacterium). The method involves contacting sample with
XX      one or more types of nanoparticle having target binding complements and
XX      detecting any light scattering complex formed. The nanoparticle probe
XX      complexes comprise two or more probes bound to a specific target analyte.
XX      The present sequence is a human mutant APC gene specific probe. This
XX      sequence is used in the preparation of nanoparticle-oligonucleotide
XX      conjugate probes.
XX      SEQ Sequence 33 BP; 29 A; 1 C; 3 G; 0 T; 0 U; 0 Other;
XX      Query Match 1.0%; Score 27.2; DB 1; Length 33;
XX      Best Local Similarity 90.6%; Pred. No. 3.1e+02;
XX      Matches 29; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX      QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
XX      Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAGCAGAAAAAAAAA 32
XX      RESULT 140
XX      AAN70281/c
XX      ID AAN70281 standard; DNA; 27 BP.
XX      AC AAN70281;
XX      DT 03-OCT-2002 (revised)
XX      DT 26-MAY-1991 (first entry)
XX      DE Sequence of scissile link probe MRC071 (HL).
XX      KW Hybridisation; probe; ss.
XX      OS Synthetic.
XX      PN EP227976-A.
XX      PD 08-JUL-1987.
XX      PF 04-DEC-1986; 86EP-00116906.
XX      PR 05-DEC-1985; 85US-00805279.
XX      (MEIO-) MEIOGENICS INC.
XX      PI Duck P, Bender R, Crosby W, Robertson JG;
XX      WPI; 1987-186567/27.

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XX Synthetic nucleic acid probes - comprising two nucleic acid sequences
PT linked by a scissile linkage.
XX
XX
XX Example; p29; 46pp; English.
XX
CC The patent claims a new molecule of formula (NA1----S----NA2)n. NA1 and
CC NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile
CC linkage; n = 1 or 1,000, which is used for the detection of specific DNA
CC or RNA sequences in a test soln. The scissile link probes may be PL
CC (Permanent Linkage to Solid Support) or HL (Hydrolysable Linkage to Solid
CC Support). The differential liability of DNA and RNA may be exploited in a
CC heterogeneous system when the scissile linkage is an RNA molecule. In the
CC examples, counter probe molecules 9 through 16 were used to determine
CC suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
CC OS field.)
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 2 U; 0 Other;
Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
DB 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 141
AAN70274/c
ID AAN70274 standard; DNA; 27 BP.
XX
AC
XX AAN70274;
XX
DT 03-OCT-2002 (revised)
DT 26-MAY-1991 (first entry)
XX
XX Sequence of scissile link probe MRC046 (PL).
XX
XX Hybridisation; probe; ss.
XX
XX Synthetic.
XX
XX EP227976-A.
XX
XX 08-JUL-1987.
XX
XX 04-DEC-1986; 86EP-00116906.
XX
XX 05-DEC-1985; 85US-00805279.
XX
XX (MEIO-) MEIOGENICS INC.
XX
XX Duck P, Bender R, Crosby W, Robertson JG;
XX
XX WPI; 1987-186567/27.
XX
XX Synthetic nucleic acid probes - comprising two nucleic acid sequences
PT linked by a scissile linkage.
XX
XX
XX Example; p29; 46pp; English.
XX
CC The patent claims a new molecule of formula (NA1----S----NA2)n. NA1 and
CC NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile
CC linkage; n = 1 or 1,000, which is used for the detection of specific DNA
CC or RNA sequences in a test soln. The scissile link probes may be PL
CC (Permanent Linkage to Solid Support) or HL (Hydrolysable Linkage to Solid
CC Support). The differential liability of DNA and RNA may be exploited in a
CC heterogeneous system when the scissile linkage is an RNA molecule. In the
CC examples, counter probe molecules 9 through 16 were used to determine
CC suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
CC OS field.)
XX
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```
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 21 T; 6 U; 0 Other;
Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
DB 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 142
AAN92240/c
ID AAN92240 standard; DNA; 27 BP.
XX
AC AAN92240;
XX
XX 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 25-APR-1990 (first entry)
XX
XX SS probe MRC046.
DE
XX Probe MRC046; solid support; ribonuclease.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FT misc_feature 1..10
FT /*tag= a
FT /note= "deoxyribonucleotides."
FT misc_feature 11..16
FT /*tag= b
FT /note= "ribonucleotides."
FT misc_feature 17..27
FT /*tag= c
FT /note= "deoxyribonucleotides."
XX
XX WO8910415-A.
XX
XX 02-NOV-1989.
XX
XX 29-APR-1988; 88US-00187814.
XX
XX 29-APR-1988; 88US-00187814.
XX
XX (MEIO-) MEIOGENICS INC.
XX
XX Duck P, Bender R;
XX
XX WPI; 1989-339977/46.
XX
XX Detecting target nucleic acid molecules - using excess complementary
XX nucleic acid probes and nicking to complete a cycling sequence.
XX
XX Disclosure; Page 24; 34pp; English.
XX
XX Probe MRC046 is bound by a permanent linkage to a solid support at its 3'
XX end. It is used by reacting excess probe with a target nucleic acid;
XX nicking hybridised probe at least once within a predetermined sequence to
XX form 2 or more probe fragments hybridised to the target sequence, which
XX results in the probe fragments becoming hybridised to another probe; and
XX identifying probe fragments, so detecting the target sequence. The probe
XX can react with target sequence to complete a cycling sequence. Using this
XX system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can
XX be obt'd. The probe is cleavable at the ribonucleotides by a ds RNase, eg
XX RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)
XX
XX (Updated on 25-MAR-2003 to correct PR field.)
XX
XX Sequence 27 BP; 0 A; 0 C; 0 G; 21 T; 6 U; 0 Other;
SQ
Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
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Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 143
AAN92247/C
ID AAN92247 standard; DNA; 27 BP.
XX
AC AAN92247;
XX
DT 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 25-APR-1990 (first entry)
XX
DE SS probe MRCO71.
XX
KW Probe MRCO71; solid support; ribonuclease.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..15
FT /note= "deoxyribonucleotides."
FT /tag= a
FT misc_feature 16..17
FT /note= "ribonucleotides."
FT /tag= b
FT misc_feature 18..27
FT /note= "deoxyribonucleotides."
FT /tag= c
FT WO8910415-A.
XX
PN 02-NOV-1989.
XX
PD 29-APR-1988; 88US-00187814.
XX
PR 29-APR-1988; 88US-00187814.
XX
PA (MEIO-) MEIOGENICS INC.
XX
PI Duck P, Bender R;
XX
PS WPI; 1989-339977/46.
XX
PT Detecting target nucleic acid molecules - using excess complementary
PT nucleic acid probes and nicking to complete a cycling sequence.
XX
PS Disclosure; Page 24; 34pp; English.
XX
CC Probe MRCO71 is bound by a hydrolysable linkage to a solid support at its
CC 3' end. It is used by reacting excess probe with a target nucleic acid;
CC nicking hybridised probe at least once within a predetermined sequence to
CC form 2 or more probe fragments hybridised to the target sequence, which
CC results in the probe fragments becoming hybridised to another probe; and
CC identifying probe fragments, so detecting the target sequence. The probe
CC can react with target sequence to complete a cycling sequence. Using this
CC system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can
CC be obt'd. The probe is cleavable at the ribonucleotides by a ds RNase, eg
CC RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)
CC (Updated on 25-MAR-2003 to correct PR field.)
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 2 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 144
AAQ40854
ID AAQ40854 standard; DNA; 27 BP.
XX
AC AAQ40854;
XX
DT 23-SEP-1993 (first entry)
XX
DE DNA sequence used in DNA replication method.
XX
KW ss.
XX
OS Synthetic.
XX
PN JP05103673-A.
XX
PD 27-APR-1993.
XX
PF 26-AUG-1991; 91JP-00240525.
XX
PR 26-AUG-1991; 91JP-00240525.
XX
PA (UYAR-) UNIV ARIZONA.
XX
DR WPI; 1993-171830/21.
XX
PT Replication of DNA - useful in genetic engineering and medical
PT applications.
XX
PS Disclosure; Page 20; 20pp; Japanese.
XX
CC The sequence is given in the disclosure to illustrate the invention
XX
SQ Sequence 27 BP; 27 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 27

RESULT 145
AAF99706/C
ID AAF99706 standard; DNA; 27 BP.
XX
AC AAF99706;
XX
DT 12-JUN-2001 (first entry)
XX
DE Immunostimulatory nucleic acid #822.
XX
KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
OS Synthetic.
XX
PN WO200122972-A2.
XX
PD 05-APR-2001.
XX
PF 25-SEP-2000; 2000WO-US026383.
XX
PR 25-SEP-1999; 99US-0156113P.
PR 27-SEP-1999; 99US-0156135P.
PR 23-AUG-2000; 2000US-0227436P.
```

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XX (IOWA ) UNIV IOWA RES FOUND.
PA (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Schetter C, Vollmer J;
PI
XX WPI; 2001-273485/28.
DR
XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
PT using immunostimulatory Py-rich and TG nucleic acids.
PT
XX
XX Claim 101; Page 56; 338pp; English.
PS
XX The present invention relates to a method for stimulating an immune
CC response. The method comprises administering an immunostimulatory nucleic
CC acid to a non-rodent subject in sufficient quantity to stimulate an
CC immune response. The present sequence is one such immunostimulatory
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
CC also useful for preventing cancer, asthma, infectious disease, allergy or
CC immune deficiency. The present sequence can also be used to redirect a
CC Th2 to a Th1 immune response and to activate immune cells. Note: the
CC present sequence may have a phosphorothioate backbone
XX
XX Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;
SQ
Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 146
ABS78427/c
ID ABS78427 standard; DNA; 27 BP.
XX
XX ABS78427;
AC
XX
XX 13-DEC-2002 (first entry)
DT
XX
XX Angiogenesis inhibitory oligonucleotide #911.
DE
XX
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubosis; Osler-Webber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophiliac joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.
XX
XX Synthetic.
OS
XX
XX WO200253141-A2.
PN
XX
XX 11-JUL-2002.
PD
XX
XX 14-DEC-2001; 2001WO-US048458.
PF
XX
XX 14-DEC-2000; 2000US-0255534P.
PR
XX (COLE-) COLEY PHARM GROUP INC.
PA
XX Bratzler RL;
PI
XX WPI; 2002-566690/60.
DR

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XX Inhibiting angiogenesis in a subject, involves administering at least one
PT antiangiogenic nucleic acid molecule to the subject.
PT
XX
XX Claim 2; Page 35; 276pp; English.
PS
XX The invention relates to inhibiting angiogenesis in a subject, comprising
CC administering at least one antiangiogenic nucleic acid molecule. Also
CC included is a kit comprising a first container housing the antiangiogenic
CC nucleic acids, and instructions for administering them to a subject
CC having a condition characterised by unwanted angiogenesis. The method is
CC useful for inhibiting angiogenesis associated with solid tumour growth,
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC rubosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
CC neovascularisation, telangiectasia, haemophiliac joints, angiofibroma,
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC acid of the invention
XX
XX Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;
SQ
Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 147
ABL39406/c
ID ABL39406 standard; DNA; 27 BP.
XX
XX ABL39406;
AC
XX
XX 16-APR-2002 (first entry)
DT
XX
XX Immunostimulatory nucleic acid SEQ ID NO: 842.
DE
XX
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KW angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
KW
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH modified_base 1..27
FT /tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone"
XX
XX WO200197843-A2.
PN
XX
XX 27-DEC-2001.
PD
XX
XX 22-JUN-2001; 2001WO-US020154.
PF
XX
XX 22-JUN-2000; 2000US-0213346P.
PR
XX (IOWA ) UNIV IOWA RES FOUND.
PA
XX Weiner G, Hartmann G;
PI
XX WPI; 2002-154611/20.
DR
XX
XX Treating or preventing cancer, such as basal cell carcinoma, comprises
PT administering immunostimulatory nucleic acids that induce expression of
PT cell surface antigens and antibodies to a subject having or at risk of
PT developing cancer.
PT
XX
XX Disclosure; Page 310; 312pp; English.
PS

```

XX The present invention relates to methods for treating or preventing
 CC cancer, involving administering to a subject having or at risk of
 CC developing cancer immunostimulatory nucleic acids that induce expression
 CC of cell surface antigens and antibodies. The methods are useful for
 CC treating or preventing cancer such as basal cell carcinoma, bladder
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 CC breast cancer, cervical cancer, colon and rectum cancer, connective
 CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
 CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 CC present sequence is an immunostimulatory oligonucleotide described in the
 CC exemplification of the invention

XX SQ Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;
 Query Match 1.0%; Score 27; DB 1; Length 27;
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
 DB 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 148
 ABK66592/c
 ID ABK66592 standard; DNA; 27 BP.
 AC ABK66592;
 XX
 DT 02-JUL-2002 (first entry)
 DE Human gene specific PCR primer #680.
 XX
 KW Primer; ss; DNA microarray; differential expression analysis; human.
 XX
 OS Homo sapiens.
 XX
 PN US6352829-B1.
 XX
 PD 05-MAR-2002.
 XX
 PF 05-JAN-1999; 99US-00225928.
 XX
 PR 21-MAY-1997; 97US-00859998.
 XX
 PA (CLON-) CLONTECH LAB INC.
 XX
 PI Chenchik A, Johhadze G, Bibilashvili R;
 XX
 DR WPI; 2002-314699/35.

XX Producing sub-population of labeled nucleic acids, useful for analyzing
 PT differences in RNA profiles between several different physiological
 PT sources, using set of distinct gene specific primers.

XX Example 3; SEQ ID NO 680; 11pp; English.

XX The invention relates to producing a sub-population of labeled nucleic
 CC acids (NAs) comprising contacting a NA sample from a physiological
 CC source, with a pool of 50 distinct gene specific primers under suitable
 CC conditions to enzymatically generate sub-population of NAs, where each
 CC gene specific primer has a sequence complementary to a distinct mRNA, and
 CC each labeled NA is generated using a single gene specific primer. The
 CC method is useful for producing a sub-population of labeled NAs which is
 CC useful for analysing the differences in the RNA profiles between several
 CC different physiological sources, where the method comprises producing
 CC subpopulation of labeled NAs for the different physiological sources,
 CC comprising the populations for each physiological source to identify
 CC differences in the population, where the comparison is preferably

CC performed by hybridising the labeled NAs for each of the distinct
 CC physiological sources to an array of probe NAs stably associated with the
 CC surface of a substrate to produce a hybridisation pattern for each of the
 CC sources, and comparing the patterns for each of the sources, where
 CC differential gene expression assays are utilised in differential
 CC expression analysis of diseased a normal tissue e.g. neoplastic a normal
 CC tissue, or different tissue or subtype types. The present sequence is a
 CC human gene specific PCR primer used in the method of the invention. Note:
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from USPTO
 CC at http.wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1

XX SQ Sequence 27 BP; 4 A; 8 C; 6 G; 9 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;
 Best Local Similarity 100.0%; Pred. No. 2.8e+02;
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2578 GAAGAGTCTACCGACATTAAGTCGAGG 2604
 DB 27 GAAGAGTCTACCGACATTAAGTCGAGG 1

RESULT 149
 ACH03245/c
 ID ACH03245 standard; DNA; 27 BP.
 XX
 AC ACH03245;
 XX
 DT 25-SEP-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #880.
 XX
 KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 OS Synthetic.
 XX
 PN US2003050268-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 29-MAR-2002; 2002US-00112653.
 XX
 PR 29-MAR-2001; 2001US-0279642P.
 XX
 PA (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX
 PI Krieg AM, Berg DJ;
 XX
 DR WPI; 2003-521815/49.

XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.

XX Disclosure; Page 32; 229pp; English.

XX The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid

XX SQ Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;

```
Best Local Similarity 100.0%; Pred. No. 2.8e+02; Mismatches 0; Gaps 0;
Matches 27; Conservative 0; Indels 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 150
ADB37208/c
ID ADB37208 standard; DNA; 27 BP.
XX
AC ADB37208;
XX
DT 04-DEC-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #822.
XX
KW db; allergy; asthma; poly-G nucleic acid; aerosol formulation;
KW hypo-responsive subject; immunostimulatory.
XX
OS Synthetic.
XX
PN US2003087848-A1.
XX
PD 08-MAY-2003.
XX
PF 02-FEB-2001; 2001US-00776479.
XX
PR 03-FEB-2000; 2000US-0179991P.
XX
PA (BRAT/) BRATZLER R L.
PA (PETE/) PETERSEN D M.
PA (FOUR/) FOURON Y.
XX
PI Bratzler RL, Petersen DM, Fouron Y;
DR WPI; 2003-657977/62.
XX
PT Treating and/or preventing allergy or asthma using an immunostimulatory
PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX
PS Disclosure; Page 17; 221pp; English.
XX
CC The invention relates to a method of treating or preventing allergy or
CC asthma which comprises administering to a subject a poly-G nucleic acid
CC in an aerosol formulation. The methods and compositions of the present
CC invention are useful for diagnosing and/or treating asthma and allergy
CC especially in a hypo-responsive subject. The present sequence represents
CC an immunostimulatory nucleic acid of the invention.
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 151
ADS19108/c
ID ADS19108 standard; DNA; 27 BP.
XX
AC ADS19108;
XX
DT 30-DEC-2004 (first entry)
XX
DE Multisignal labeling reagent associated oligonucleotide seqid 3.
XX
KW labeling molecule; solubility; multisignal labeling reagent; ss;
```

```
KW DNA-RNA hybrid.
XX Synthetic.
OS
XX Key Location/Qualifiers
FH misc_RNA 1
FT /*tag= a
FT /*note= "Allylamine modified uridine"
FT misc_RNA 7
FT /*tag= b
FT /*note= "Allylamine modified uridine"
FT misc_RNA 13
FT /*tag= c
FT /*note= "Allylamine modified uridine"
FT misc_RNA 19
FT /*tag= d
FT /*note= "Allylamine modified uridine"
FT misc_RNA 25
FT /*tag= e
FT /*note= "Allylamine modified uridine"
XX
PN US2004198971-A1.
XX
PD 07-OCT-2004.
XX
PF 03-APR-2003; 2003US-00407818.
XX
PR 03-APR-2003; 2003US-00407818.
XX
PA (RABB/) RABBANI E.
PA (STAV/) STAVRIANOPOULOS J G.
PA (DONE/) DONEGAN J J.
XX
PI Rabbani E, Stavrianopoulos JG, Donegan JJ;
XX WPI; 2004-727850/71.
XX
PT Composition of multi signal labeling reagents, useful for detecting or
PT quantifying analyte in specimen, has oligomer/polymer having labeled
PT moieties, reactive groups and charged groups linked to oligomer/polymer.
XX
PS Example 7; SEQ ID NO 3; 20pp; English.
XX
CC The invention describes a composition (I) of matter comprising an
CC oligomer or polymer having two or more labeled groups, where the label or
CC labels are chemically linked to the oligomer or polymer, one or more
CC reactive groups, and one or more charged groups where the charged groups
CC are covalently linked to the oligomer or polymer or comprise part of the
CC backbone of the oligomer or polymer, or any of their combination. Also
CC described are: a composition (II) comprising a target molecule that has
CC been labeled using (I); and a composition (III) prepared by a target
CC labeling process comprising (i) providing a target for labeling, and a
CC labeling reagent having the formula (F1) or (F2), (ii) reacting the
CC target and the labeling reagent to form the composition having the
CC formula (F3) or (F4). (i) is useful for labeling a target molecule;
CC detecting or quantifying an analyte in a specimen; and detecting or
CC quantifying an analyte in a specimen. (ii) or (iii) is useful for
CC detecting or quantifying an analyte, which involves providing (ii) or
CC (iii), where the target is an analyte specific moiety, contacting the
CC (ii) or (iii) with a specimen suspected of containing the analyte, and
CC measuring the amount of (ii) or (iii) bound to analytes in the specimen
CC to detect or quantify the analyte. (i) detects or quantifies analyte with
CC high sensitivity. In (i), the multiple labeled groups increases the
CC amount of signal that is added to the analyte specific moiety, the
CC presence of reactive groups enables attachment of the multiple labeled
CC groups to a desirable target and the presence of charged group increases
CC solubility. This sequence represents a multisignal labeling reagent
CC associate oligonucleotide.
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 22 T; 5 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
```

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Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 152
ADU90227/C
ID ADU90227 standard; DNA; 27 BP.
XX AC
XX AC
XX ADU90227;
XX DT
XX DT 10-FEB-2005 (first entry)
XX DE
XX DE Allergic response suppressor oligonucleotide #911.
XX KW ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
XX KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
XX KW immunostimulant; asthma; rhinitis; urticaria; dermatitis;
XX KW bacterial infection; viral infection.
XX OS
XX OS Synthetic.
XX PN
XX PN US2004235774-A1.
XX PD
XX PD 25-NOV-2004.
XX PF
XX PF 23-APR-2004; 2004US-00831778.
XX PR
XX PR 03-FEB-2000; 2000US-0179991P.
XX PR 02-FEB-2001; 2001US-00776479.
XX XX
XX XX (BRATZ/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX XX
XX PI Bratzler RL, Petersen DM, Fouron Y;
XX XX
XX XX WPI; 2004-833006/82.
XX XX
XX XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic
XX PT dermatitis, in a subject, comprises administering a first and second dose
XX PT of an immunostimulatory nucleic acid.
XX XX
XX PS Disclosure; SEQ ID NO 911; 235pp; English.
XX XX
XX CC The invention relates to a method of suppressing a symptom of an allergic
XX CC response in a subject by administering a first and second dose of an
XX CC immunostimulatory nucleic acid that comprises a nucleotide sequence
XX CC comprising 5'-cg-3', and where the second dose is administered from 1 day
XX CC to 8 weeks after the first dose. The methods and compositions of the
XX CC present invention are useful for the treatment or prevention of asthma
XX CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
XX CC an immunostimulatory nucleic acid alone or in combination with other
XX CC medicaments. They can also be used in preventing bacterial and viral
XX CC infections. This sequence represents an oligonucleotide used in the
XX CC method of the invention.
XX XX
XX SQ Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 153
AED75671/C
ID AED75671 standard; DNA; 27 BP.

```

```

XX AC AED75671;
XX XX
XX DT 12-JAN-2006 (first entry)
XX XX
XX DE Immunostimulatory oligonucleotide, SEQ ID 880.
XX XX
XX KW Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
XX KW Anticancer; Dermatological; Antiallergic; helper T-lymphocyte;
XX KW immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
XX KW Crohns disease; ulcerative colitis; eczema; skin allergy;
XX KW contact dermatitis; ss; phosphorothioate.
XX OS
XX OS Synthetic.
XX XX
XX XX Key Location/Qualifiers
XX FT modified_base 1..27
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Phosphorothioate backbone"
XX XX
XX PN US2005250726-A1.
XX XX
XX PD 10-NOV-2005.
XX XX
XX PF 12-MAY-2005; 2005US-00127654.
XX XX
XX PR 29-MAR-2001; 2001US-0279642P.
XX PR 29-MAR-2002; 2002US-00112653.
XX XX
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX XX
XX PI Krieg AM, Berg DJ;
XX XX WPI; 2005-768014/78.
XX XX
XX PT Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
XX PT to augment T-helper cells like immune activation and to treat non-
XX PT allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.
XX XX
XX PS Disclosure; SEQ ID NO 880; 59pp; English.
XX XX
XX CC The present invention relates to a method for augmenting T-helper 1 cells
XX CC (Th1)-like immune activation in a subject. The method comprises
XX CC administering an immunostimulatory nucleic acid (I) to induce Th1-like
XX CC immune activation; and administering a cyclooxygenase inhibitor (II) to
XX CC inhibit prostaglandin expression, is new. The present sequence is one
XX CC such immunostimulatory nucleic acid. (I) is useful for treating non-
XX CC allergic inflammatory diseases such as psoriasis, inflammatory bowel
XX CC diseases (Crohn's disease and ulcerative colitis), eczema, allergic
XX CC contact dermatitis or latex dermatitis.
XX XX
XX SQ Sequence 27 BP; 0 A; 0 C; 0 G; 27 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 2.8e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 154
AAV15487/C
ID AAV15487 standard; DNA; 29 BP.
XX AC
XX AC AAV15487;
XX XX
XX DT 20-JUL-1998 (first entry)
XX XX
XX DE PR-1 promoter primer P41+ for in vivo footprinting.
XX XX

```



```

PN WO200116352-A1.
XX
PD
XX
XX 08-MAR-2001.
XX
XX 25-AUG-2000; 2000WO-US023414.
XX
XX 27-AUG-1999; 99US-0151261P.
XX
XX (PHYL-) PHYLOS INC.
XX
XX Kuimelis RG;
XX
XX WPI; 2001-183261/18.
XX
XX Encoding and sorting in vitro translated proteins, useful for the
PT identification of desired binding partners, comprises attaching a nucleic
PT acid linker to the protein and binding an encoding molecule to the
PT linker.
XX
XX Example 3; Fig 9B; 48pp; English.
XX
XX The sequence represents part of a branched encoding molecule used in
CC methods to hybridise a capture probe to the addressing element of a DNA
CC linker attached to an in vitro translated protein, in order to immobilise
CC the protein to a solid support. The new methods are useful for tagging or
CC encoding in vitro translated proteins with unique and minimal encoding
CC molecules and sorting these molecules onto solid supports. They are also
CC useful for the identification of a desired binding partner. The method
CC allows the use of pre-made sets of universal encoding molecules, such as
CC nucleic acid(s) (analogues). These can be used in conjunction with
CC corresponding universal microarrays or sets of microparticles to create
CC new protein display systems which are flexible, modular, scalable and
CC cost effective. The method allows the use of nucleic acid analogue which
CC are not susceptible to enzymatic incorporation or polymerisation and are
CC superior to conventional DNA/RNA. The proteins can also be labelled with
CC fluorescent groups which can be used to monitor the protein in real time.
CC The absence of RNA is advantageous as they can adopt secondary structures
CC which are difficult to predict and can interfere with hybridisation steps
CC and protein folding/function
XX
XX Sequence 29 BP; 27 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 1.0%; Score 27; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAA 27
RESULT 157
AAH20990
ID AAH20990 standard; DNA; 29 BP.
XX
XX AAH20990;
AC
XX
XX 31-AUG-2001 (first entry)
DT
XX
XX C-myc epitope puromycin linker primer #1.
DE
XX
XX C-myc; epitope; detection; amplification; biomedical diagnosis;
KW environmental monitoring; primer; ss.
XX
XX Unidentified.
OS
XX
XX WO200142494-A2.
PN
XX
XX 14-JUN-2001.
PD
XX
XX 20-OCT-2000; 2000WO-EP010336.
PF
XX
XX 10-DEC-1999; 99DE-01059857.
PR

```

```

XX
XX (AVET ) AVENTIS RES & TECHNOLOGIES GMBH & CO KG.
XX
XX Burgstaller P, Konz D;
XX
XX WPI; 2001-381706/40.
XX
XX System for detecting immobilized analyte, useful e.g. for biomedical
PT diagnosis, has as detection agent specific polypeptide coupled to nucleic
PT acid for signal amplification.
XX
XX Example; Page 6; 12pp; German.
XX
XX This invention describes a novel test system (A) which comprises at least
CC one immobilized analyte (I) on an insoluble carrier and a polypeptide
CC detection agent (II), specific for (I) and conjugated, via a linker, to
CC an amplifier (III). (A) is used for direct, in vitro detection of (I)
CC with amplification of the signal by polymerase chain reaction (PCR), or a
CC related technique, applied to (III). The method is useful in biomedical
CC diagnosis and environmental monitoring and can be used to detect a wide
CC range of (I), e.g. diagnostic or pharmaceutical agents, secondary
CC metabolites, herbicides or pesticides (A) allow simultaneous, parallel
CC detection of many different analytes (high throughput capacity),
CC relatively simply (only a few incubation and washing steps are required)
CC and with high sensitivity and selectivity. This sequence represents
CC primer used in the amplification of the c-myc DNA fragment which encodes
CC an epitope used to illustrate the method of the invention
XX
XX Sequence 29 BP; 27 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 1.0%; Score 27; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2735
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAA 27
RESULT 158
AAK98637
ID AAK98637 standard; DNA; 29 BP.
XX
XX AAK98637;
AC
XX
XX 19-APR-2002 (first entry)
DT
XX
XX S cerevisiae alpha factor receptor STE2 vector linker.
DE
XX
XX Biological material detection; electrophoresis; bioprobe isolation;
KW alpha factor receptor; STE2; linker; ss.
XX
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FH modified_base 29
FT /*tag= a
FT /mod_base= OTHER
FT /note= "modified by puromycin"
XX
XX WO200204656-A2.
PN
XX
XX 17-JAN-2002.
PD
XX
XX 26-JUN-2001; 2001WO-EP007259.
PF
XX
XX 07-JUL-2000; 2000DE-01033194.
PR
XX
XX (XZIL-) XZILLION GMBH & CO KG.
PA
XX
XX Wagner P, Polakowski T;
PI
XX
XX WPI; 2002-154934/20.
DR

```

XX Detecting and purifying biological material by (di)electrophoresis,
PT useful e.g. for separating tissues and viruses, comprises using a probe
PT that alters (di)electrophoretic properties.
XX
PS Example 1; Page 12; 20pp; German.
XX
CC The present invention relates to a method for the detection or
CC purification of biological material by electrophoresis, which comprises
CC (i) treating the biological material containing different species with a
CC bioprobe and (ii) establishing an electric field for detection or
CC purification of at least one complex formed between the biological
CC material being tested and a specifically bound bioprobe. The method is
CC used for detection and purification of tissue, cells, cell organelles,
CC viruses, proteins, nucleic acids, lipids and/or other organic compounds.
CC It can also be used for the isolation of specific bioprobes from a
CC library of bioprobes. The present sequence is a linker described in the
CC exemplification of the invention
XX
SQ Sequence 29 BP; 27 A; 2 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 29;
Best Local Similarity 100.0%; Pred. No. 2.9e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
DB 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 27

RESULT 159
AAV48087
ID AAV48087 standard; DNA; 30 BP.
XX
AC AAV48087;
XX
DT 27-OCT-1998 (first entry)
XX
DE Oligonucleotide 30-P.
XX
KW In situ translation; RNA-protein fusion; binding reagent; antibody;
KW industrial catalyst; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 30
FT /*tag= a
FT /note= "Puromycin"
FT
FN WO9831700-A1.
XX
XX 23-JUL-1998.
XX
XX 14-JAN-1998; 98WO-US000807.
XX
XX 21-JAN-1997; 97US-0035963P.
XX
XX 06-JAN-1997; 97US-0064491P.
XX
XX (GEO) GEN HOSPITAL CORP.
XX
XX Szostak JW, Roberts RW, Liu R;
XX
XX WPI; 1998-414032/35.
XX
XX Selection of specific protein by screening protein-RNA fusions generated
XX in vitro or in situ - useful for, e.g. identifying enzymes and antibodies
XX with altered properties, potentially useful as catalysts or for therapy
XX or diagnosis.
XX
XX Disclosure; Page 39; 94pp; English.
XX
XX The Oligonucleotides AAV48087, AAV48089-V48091 and AAV48096-V48098 and

CC variations were used to generate RNA-protein fusions. These were used in
CC the selection of a specific protein or RNA, by in vitro or in situ
CC translation of candidate RNA molecules to produce RNA-protein fusions,
CC then selecting specific RNA protein fusions. The method is used to select
CC proteins (or DNA encoding them) having altered properties, e.g. for
CC identification of new binding reagents, to identify improved human
CC antibodies or new enzymes. These proteins are potentially useful in
CC diagnosis and therapy, or as industrial catalysts. The methods allow many
CC rounds of selection and amplification to be performed, resulting in
CC enrichment of even very rare molecules and allowing isolation of proteins
CC that bind specifically to almost any compound or catalyse almost any
CC reaction
XX
SQ Sequence 30 BP; 27 A; 2 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 1.0%; Score 27; DB 1; Length 30;
Best Local Similarity 100.0%; Pred. No. 3e+02;
Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
DB 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 27

RESULT 160
ADY75117
ID ADY75117 standard; DNA; 30 BP.
XX
AC ADY75117;
XX
DT 02-JUN-2005 (first entry)
XX
DE Nucleic acid construct production associated polynucleotide #9.
XX
KW recombinant DNA; ds.
XX
OS Unidentified.
XX
PN WO2005024018-A1.
XX
XX 17-MAR-2005.
XX
XX 08-SEP-2004; 2004WO-JP013399.
XX
XX 08-SEP-2003; 2003JP-00315385.
XX
XX (ZOBG-) ZOEGENE CORP.
XX
XX Sasaki T, Shiratori M;
XX
XX WPI; 2005-223378/23.
XX
XX Producing a nucleic acid construct, for producing a protein nucleic acid
XX conjugate, comprises partial annealing a two single stranded nucleic
XX acids, and coupling the nucleic acids to a third single stranded nucleic
XX acid.
XX
XX Example 1; Page 30; 85pp; Japanese.
XX
XX The invention describes a method of producing (M1) a nucleic acid
XX construct having a first, second and third single stranded nucleic acid.
XX The method comprises: coupling the first and third single stranded
XX nucleic acid by a chemical bond present on the same terminals of each
XX nucleic acid through a linker; annealing the first and second single
XX stranded nucleic acid; and coupling the second and third single stranded
XX nucleic acid by ligase. Also described are: a nucleic acid construct (I)
XX obtainable by (M1); a protein nucleic acid conjugate with (I); a DNA-RNA-
XX coupling the protein encoded by a coding sequence with (I); a DNA-RNA-
XX protein conjugate (III) obtainable by annealing DNA to an mRNA strand of
XX (II); and a double stranded DNA-protein conjugate obtainable by carrying
XX out a polymerase reaction with DNA and a degrading RNA of (III). (M1) Is
XX useful for producing a nucleic acid construct having a first, second and
XX third single stranded nucleic acid. (I) Is useful for producing (II)

CC which involves coupling protein encoded by (I) with (I) by a nucleic acid
 CC derivative. (I) is translated with a protein translation system after
 CC heating (I) at 60 - 90 deg C and cooling (I) after the heating step. The
 CC method is useful for purifying (II) which involves separating and
 CC refining (II) by the labeling substance present on the third single
 CC stranded nucleic acid. The method is useful for acquiring a base sequence
 CC of DNA or RNA that encodes a protein which involves selecting and
 CC purifying (II) and amplifying the coding sequence of (II). (II) is useful
 CC for producing (III) which involves performing reverse transcription of
 CC mRNA of (II). (M1) Enables production of (I), which in turn enables
 CC efficient production of (II). This sequence represents a polynucleotide
 CC associated with the nucleic acid construct production method.

XX SQ Sequence 30 BP; 26 A; 3 C; 0 G; 0 T; 0 U; 1 Other;
 Query Match 1.0%; Score 27; DB 1; Length 30;
 Best Local Similarity 96.4%; Pred. No. 3e+02;
 Matches 27; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
 Db 3 CNAATAAAAAAAAAAAAAAAAAAAAAAAAAA 30

RESULT 161

ABN83375
 ID ABN83375 standard; DNA; 32 BP.

AC ABN83375;

XX 15-AUG-2002 (first entry)

DE Mononucleotide repeat locus BAT26 probe #2.

XX Mononucleotide repeat locus; human; BAT26; probe; microsatellite; tumour;
 KW ss.

XX Homo sapiens.

FT Key Location/Qualifiers
 modified_base 1 /*tag= a
 /mod_base= OTHER
 /note= "Labelled with LightCycler fluorescent dye LC-Red-
 640"

XX EP1207210-A1.

XX 22-MAY-2002.

XX 13-NOV-2001; 2001EP-00126930.

XX 15-NOV-2000; 2000EP-00124897.

XX (HOFF) ROCHE DIAGNOSTICS GMBH.

PA (HOFF) HOFFMANN LA ROCHE & CO AG F.

XX Dietmaier W;

XX WPI; 2002-437469/47.

XX Analyzing repeat sequences in DNA using a probe which hybridizes to
 PT adjacent repetitive and non-repetitive regions and determining hybrid
 PT melting point is useful to detect microsatellite instability such as in
 PT hereditary cancer.

XX Claim 16; Page 7; 19pp; English.

XX The present invention relates to a method for analysing a target nucleic
 CC acid consisting of repetitive and non-repetitive sequences. The method
 CC comprises hybridising a polynucleotide probe comprising a segment
 CC complementary to a non-repetitive region and a segment complementary to
 CC an adjacent repetitive region, where the second segment consists of a

CC defined number of repeats, and determining the melting point temperature
 CC of the hybrid. The method is used to analyse microsatellites, especially
 CC microsatellite instability, particularly as a means for detecting an
 CC hereditary tumours. Alternatively, the method is used to identify an
 CC individual in a population. The present sequence is a probe for
 CC Mononucleotide repeat locus BAT26, and was used to illustrate the
 CC invention

XX SQ Sequence 32 BP; 27 A; 1 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 32;
 Best Local Similarity 100.0%; Pred. No. 3.1e+02;
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAAAAAAAAAAAAAA 2734

Db 6 TAAAAAATAAAAAAAAAAAAAAAAAAAAAA 32

RESULT 162

ADH35222

ID ADH35222 standard; DNA; 32 BP.

XX ADH35222;

XX 25-MAR-2004 (first entry)

DE Probe #1 of the invention.

XX mutant; wild-type polynucleotide; cancer; colorectal cancer; ss; probe.

XX Synthetic.

XX WO2004/003173-A2.

XX 08-JAN-2004.

XX 01-JUL-2003; 2003WO-US020768.

XX 01-JUL-2002; 2002US-0392251P.

XX (UYCL-) UNIV CLEVELAND STATE.

XX Guo B;

XX WPI; 2004-142871/14.

XX Detecting mutated polynucleotides in a large population of wild-type
 PT polynucleotides, useful for e.g. detecting cancer, comprises using
 PT polymerase chain reaction amplification of extension products from mutant
 PT polynucleotides.

XX Example 2; SEQ ID NO 3; 37pp; English.

XX The present invention relates to detecting a mutant polynucleotide in a
 CC mixture of mutant polynucleotides, wild-type polynucleotides and
 CC unrelated polynucleotides, comprises using polymerase chain reaction
 CC amplification of extension products produced from mutant polynucleotide
 CC templates and by extension primers and probes. The method is useful in
 CC detecting mutated polynucleotides within a large population of wild-type
 CC polynucleotides. The method may be used in diagnosing or detecting
 CC cancer, such as colorectal cancer, in an individual. The present sequence
 CC represents a probe of the invention.

XX SQ Sequence 32 BP; 26 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 1.0%; Score 27; DB 1; Length 32;
 Best Local Similarity 100.0%; Pred. No. 3.1e+02;
 Matches 27; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAAAAAAAAAAAAAA 2734

Db 3 TAAAAAATAAAAAAAAAAAAAAAAAAAAAA 29

Db 1 AAAAAAAAAAACGAAAAAAAAAAAAAAAA 30

RESULT 164

AAZ43904/C
ID AAZ43904 standard; DNA; 27 BP.

XX
AC AAZ43904;

XX
DT 10-MAR-2000 (first entry)

XX
DE M. tuberculosis rpo-beta primer 17.

XX
KW RNA polymerase; rpo-beta; detection; diagnostic; trap probe; primer; ss.

XX
OS Mycobacterium tuberculosis.

XX
PN EP962536-A1.

XX
PD 08-DEC-1999.

XX
PF 29-MAY-1999; 99EP-00110458.

XX
PR 04-JUN-1998; 98DE-01024900.

XX
PA (HOFF) ROCHE DIAGNOSTICS GMBH.

XX
PI Weindel K, Brand J;

XX
WPI; 2000-055287/05.

XX
PT Selective detection of nucleic acids by amplification with labeled primers and detection with a trap probe.

XX
PS Example 1c; Page 19; 27pp; German.

XX
CC This invention describes a novel method for the selective detection of nucleic acids which comprises amplification of the nucleic acid with the help of labeled primers and detection with a trap probe. The methods and reagents are used for the detection of a marker primer and at least 2 immobilized (or immobilizable) trap probes with the corresponding nucleic acid sequence of interest for mutation analysis. The method can be used to detect a specific sequence in a sample of one or more nucleic acids by using several sets of primers and trap probes (i.e. in an array). The methods are useful in molecular biology and diagnostic applications, especially for simultaneous detection of multi-pathogens, typing of organisms, analyzing genetic diversity and sequencing of genes or genomes. This sequence represents a primer used in the method of the invention

XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 1 Other;

Query Match 1.0%; Score 26.6; DB 1; Length 27;
Best Local Similarity 96.3%; Pred. No. 3e+02;
Matches 26; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2735

Db 27 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 165

ABX12469/C
ID ABX12469 standard; DNA; 27 BP.

XX
AC ABX12469;

XX
DT 10-MAY-2003 (first entry)

XX
DE Cocksackie B virus 4 (CBV-4) strain VD2921, PCR primer dT26V.

XX
KW Cocksackie virus strain VD2921; diabetogenic coxsackie B virus-4; CBV-4; strain VD2921; VP1; VP2; VP3; VP4; P2A; P2B; P2C; P3A; P3B; P3C; P3D;

RESULT 163

ABL35101
ID ABL35101 standard; DNA; 30 BP.

XX
AC ABL35101;

XX
DT 04-APR-2002 (first entry)

XX
DE Phosphorothioate substituted RNA/DNA hybrid oligonucleotide SEQ ID NO: 7.

XX
KW DNA/RNA hybrid; phosphorothioate backbone; immunostimulatory; vaccine; infection; allergy; cancer; hypersensitivity; bio-warfare;

XX
KW immunostimulant; antiallergic; cytostatic; antimicrobial; anti-HIV;

XX
KW immunosuppressive; protozoicide; virucide; hepatotropic; gene therapy;

XX
KW antiinflammatory; antibacterial; ss.

XX
OS Synthetic.

XX
PH Key Location/Qualifiers

FT modified_base 1..14 /tag= a

FT /mod_base= OTHER

FT /note= "phosphorothioate backbone"

FT misc_RNA 1..14 /tag= b

FT misc_RNA 17..30 /tag= c

XX
W0200193902-A2.

XX
13-DEC-2001.

XX
07-JUN-2001; 2001WO-US018276.

XX
07-JUN-2000; 2000US-0209797P.

XX
(BIOS-) BIOSYNEXUS INC.

XX
Mond JJ, Flora M, Klinman DM;

XX
WPI; 2002-130570/17.

XX
PT New immunostimulatory compositions comprising RNA/DNA hybrid oligonucleotides, useful for enhancing an immune response or inducing cytokines, particularly for treating diseases, e.g. cancer, allergy or HIV infection.

XX
PS Example 1; Page 30; 68pp; English.

XX
CC The present invention relates to an immunostimulatory composition, which comprises at least one oligonucleotide comprising both an RNA region and a DNA region. The composition is useful for enhancing an immune response or inducing cytokines. It can be used as a vaccine adjuvant and in treating diseases, including pathogenic infection, (non-)malignant tumours (e.g. cancers of the brain, lung, ovary, breast, prostate or colon, or carcinomas and sarcomas), autoimmune diseases or allergies (e.g. allergic rhinitis, hay fever or food allergies), Lyme disease, hepatitis, HIV or malaria. The composition is also useful for treating, preventing or ameliorating the symptoms resulting from exposure to a bio-warfare agent, e.g. Ebola, Anthrax or Listeria. The present sequence is an immunostimulatory oligonucleotide described in the exemplification of the invention

XX
SQ Sequence 30 BP; 28 A; 1 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 1.0%; Score 26.8; DB 1; Length 30;
Best Local Similarity 93.3%; Pred. No. 3.1e+02;
Matches 28; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2738

KW diabetes; diabetogenic enterovirus; beta cell loss; blindness;
 XX renal failure; leg amputation; PCR; primer; ss.

XX Cocksackievirus.

XX WO2002103060-A2.

XX 27-DEC-2002.

XX 19-JUN-2002; 2002WO-IB003278.

XX 20-JUN-2001; 2001SE-00002198.

XX (INNO-) INNOVENTUS PROJECT AB.

XX Tuvemo HT, Frisk GE, Yin H;

XX WPI; 2003-278229/27.

XX Polymerase chain reaction and primers for detecting nucleic acids from
 PT the diabetogenic coxsackie B virus-4 strain VD2921.

XX Example 5; Page 44; 79pp; English.

XX The invention describes a polymerase chain reaction (PCR) and primers for
 CC detecting nucleic acids from the diabetogenic coxsackie B virus-4 (CBV-4)
 CC strain VD2921, (particularly VP1, VP2, VP3, VP4, P2A, P2B, P2C, P3A, P3B,
 CC P3C and P3D nucleic acids). The methods and primers are used for the
 CC detection of CBV-4 strain VD2921 which is associated with diabetes
 CC (diabetogenic enterovirus). Early detection of the diabetes e.g.

CC detection of diabetogenic enteroviral RNA in peripheral mononuclear
 CC cells, can improve prognosis by allowing treatment e.g. with antiviral
 CC drugs, to prevent further loss of beta cells and severe long term
 CC consequences of diabetes including blindness, renal failure and leg
 CC amputations. This sequence represents a primer used to determine the
 CC genomic structure of diabetogenic coxsackie B virus 4 (CBV-4) strain
 CC VD2921

XX SQ Sequence 27 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 1 Other;

Query Match 1.0%; Score 26.2; DB 1; Length 27;

Best Local Similarity 96.3%; Pred. No. 3.2e+02;

Matches 26; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAA 2734

Db 27 BAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 166

ID AD081070/c

XX AD081070 standard; DNA; 31 BP.

XX AC AD081070;

XX 29-JUL-2004 (first entry)

XX Cow prion protein microsatellite locus primer #82.

XX gene typing; polymorphic microsatellite loci; PML;
 KW disease predisposition; microsatellite marker; prion disease;
 KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
 KW milk protein; hormone; transcription factor; pT7-blue-vector; cow;
 KW microsatellite; PCR; primer; ss.

XX Bos taurus.

XX DE10236711-A1.

XX 26-FEB-2004.

XX 09-AUG-2002; 2002DE-01036711.

XX

PR 09-AUG-2002; 2002DE-01036711.

XX (UYHO-) UNIV HOHENHEIM.

XX Geldermann H, Preuss S, Han Y;

XX WPI; 2004-215730/21.

XX Example 3; Page 28; 64pp; German.

XX The invention describes a method of typing (M1) a gene (I) that has one
 CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
 CC amplification of at least one DNA region of (I) that includes PML, using
 CC as template a DNA sample containing at least one segment of (I); and
 CC determining the length of the resulting amplicon(s). Also described are:
 CC a method of determining (M2) microsatellite markers (MM) for
 CC predisposition to a disease, associated with a gene that includes one or
 CC more PML; and prediagnosis (M3) of diseases associated with gene that
 CC include PML. The method is used to identify microsatellite markers, in a
 CC disease-related gene, that are associated with a predisposition to
 CC diseases and for prediagnosis of such diseases, especially prion diseases
 CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
 CC metabolic diseases; also to type genes that encode milk proteins,
 CC hormones or transcription factors. The method is simpler, quicker and
 CC particularly less expensive than known methods based on sequencing. This
 CC sequence represents a primer used to genotype a region of the cow prion
 CC protein (PrP) comprising a polymorphic microsatellite locus.

XX SQ Sequence 31 BP; 0 A; 3 C; 0 G; 28 T; 0 U; 0 Other;

Query Match 1.0%; Score 26.2; DB 1; Length 31;

Best Local Similarity 90.3%; Pred. No. 3.5e+02;

Matches 28; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAA 2739

Db 31 AAAAAA AAAAAAAAAAAAAAAAAAGAGAGAAAAA 1

RESULT 167

ID AAN70276/c

XX AAN70276 standard; DNA; 26 BP.

XX AC AAN70276;

XX 03-OCT-2002 (revised)

XX 26-MAY-1991 (first entry)

XX Sequence of scissile link probe MRC060 (HL).

XX Hybridisation; probe; ss.

XX Synthetic.

XX EP227976-A.

XX 08-JUL-1987.

XX 04-DEC-1986; 86EP-00116906.

XX 05-DEC-1985; 85US-00805279.

XX (MEIO-) MEIOGENICS INC.

XX Duck P, Bender R, Crosby W, Robertson JG;

XX WPI; 1987-186567/27.

XX Synthetic nucleic acid probes - comprising two nucleic acid sequences

PT linked by a scissile linkage.
XX
PS Example; p29; 46pp; English.
XX
CC The patent claims a new molecule of formula (NA1)-----S-----NA2)n. NA1 and
CC NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile
CC linkage; n = 1 or 1,000, which is used for the detection of specific DNA
CC or RNA sequences in a test soln. The scissile link probes may be PL
CC (Permanent Linkage to Solid Support) or HL (Hydrolysable Linkage to Solid
CC Support). The differential liability of DNA and RNA may be exploited in a
CC heterogenous system when the scissile linkage is an RNA molecule. In the
CC examples, counter probe molecules 9 through 16 were used to determine
CC suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
CC OS field.)
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 168
AAN70275/c
ID AAN70275 standard; DNA; 26 BP.
XX
AC AAN70275;
XX
DT 03-OCT-2002 (revised)
DT 26-MAY-1991 (first entry)
XX
DE Sequence of scissile link probe MRC059 (HL).
XX
KW Hybridisation; probe; ss.
XX
OS Synthetic.
XX
PN BP227976-A.
XX
PD 08-JUL-1987.
XX
PF 04-DEC-1986; 86EP-00116906.
XX
PR 05-DEC-1985; 85US-00805279.
XX
PA (MEIO-) MEIOGENICS INC.
XX
PI Duck P, Bender R, Crosby W, Robertson JG;
XX
DR WPI; 1987-186567/27.
XX
XX Synthetic nucleic acid probes - comprising two nucleic acid sequences
PT linked by a scissile linkage.
XX
PS Example; p29; 46pp; English.
XX
CC The patent claims a new molecule of formula (NA1)-----S-----NA2)n. NA1 and
CC NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile
CC linkage; n = 1 or 1,000, which is used for the detection of specific DNA
CC or RNA sequences in a test soln. The scissile link probes may be PL
CC (Permanent Linkage to Solid Support) or HL (Hydrolysable Linkage to Solid
CC Support). The differential liability of DNA and RNA may be exploited in a
CC heterogenous system when the scissile linkage is an RNA molecule. In the
CC examples, counter probe molecules 9 through 16 were used to determine
CC suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
CC OS field.)
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 168
AAN70275/c
ID AAN70275 standard; DNA; 26 BP.
XX
AC AAN70275;
XX
DT 03-OCT-2002 (revised)
DT 26-MAY-1991 (first entry)
XX
DE Sequence of scissile link probe MRC059 (HL).
XX
KW Hybridisation; probe; ss.
XX
OS Synthetic.
XX
PN BP227976-A.
XX
PD 08-JUL-1987.
XX
PF 04-DEC-1986; 86EP-00116906.
XX
PR 05-DEC-1985; 85US-00805279.
XX
PA (MEIO-) MEIOGENICS INC.
XX
PI Duck P, Bender R, Crosby W, Robertson JG;
XX
DR WPI; 1987-186567/27.
XX
XX Synthetic nucleic acid probes - comprising two nucleic acid sequences
PT linked by a scissile linkage.
XX
PS Example; p29; 46pp; English.
XX
CC The patent claims a new molecule of formula (NA1)-----S-----NA2)n. NA1 and
CC NA2 are noncomplementary nucleic acid sequences; ---S--- = a scissile
CC linkage; n = 1 or 1,000, which is used for the detection of specific DNA
CC or RNA sequences in a test soln. The scissile link probes may be PL
CC (Permanent Linkage to Solid Support) or HL (Hydrolysable Linkage to Solid
CC Support). The differential liability of DNA and RNA may be exploited in a
CC heterogenous system when the scissile linkage is an RNA molecule. In the
CC examples, counter probe molecules 9 through 16 were used to determine
CC suitable hybridisation conditions. (Updated on 03-OCT-2002 to add missing
CC OS field.)
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 169
AAN92241/c
ID AAN92241 standard; DNA; 26 BP.
XX
AC AAN92241;
XX
DT 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 25-APR-1990 (first entry)
XX
DE SS probe MRC059.
XX
KW Probe MRC059; solid support; ribonuclease.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..10
FT /tag= a
FT /note= "deoxyribonucleotides."
FT misc_feature 11..14
FT /tag= b
FT /note= "ribonucleotides."
FT misc_feature 15..26
FT /tag= c
FT /note= "deoxyribonucleotides."
XX
PN W08910415-A.
XX
PD 02-NOV-1989.
XX
PF 29-APR-1988; 88US-00187814.
XX
PR 29-APR-1988; 88US-00187814.
XX
PA (MEIO-) MEIOGENICS INC.
XX
PI Duck P, Bender R;
XX
DR WPI; 1989-339977/46.
XX
PT Detecting target nucleic acid molecules - using excess complementary
PT nucleic acid probes and nicking to complete a cyclizing sequence.
XX
PS Disclosure; Page 24; 34pp; English.
XX
CC Probe MRC059 is bound by a hydrolysable linkage to a solid support at its
CC 3' end. It is used by reacting excess probe with a target nucleic acid;
CC nicking hybridised probe at least once within a predetermined sequence to
CC form 2 or more probe fragments hybridised to the target sequence, which
CC results in the probe fragments becoming hybridised to another probe; and
CC identifying probe fragments, so detecting the target sequence. The probe
CC can react with target sequence to complete a cyclizing sequence. Using this
CC system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can
CC be obt'd. The probe is cleavable at the ribonucleotides by a RNase, eg
CC RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 169
AAN92241/c
ID AAN92241 standard; DNA; 26 BP.

XX AAN92241;

DT 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 25-APR-1990 (first entry)

XX SS probe MRC059.

XX Probe MRC059; solid support; ribonuclease.

XX Synthetic.

XX Key Location/Qualifiers

FT misc_feature 1..10
FT /tag= a
FT /note= "deoxyribonucleotides."

FT misc_feature 11..14

FT /tag= b
FT /note= "ribonucleotides."

FT misc_feature 15..26

FT /tag= c
FT /note= "deoxyribonucleotides."

XX W08910415-A.

XX PD 02-NOV-1989.

XX PF 29-APR-1988; 88US-00187814.

XX PR 29-APR-1988; 88US-00187814.

XX PA (MEIO-) MEIOGENICS INC.

XX PI Duck P, Bender R;

XX DR WPI; 1989-339977/46.

XX PT Detecting target nucleic acid molecules - using excess complementary
XX PT nucleic acid probes and nicking to complete a cyclizing sequence.

XX PS Disclosure; Page 24; 34pp; English.

XX CC Probe MRC059 is bound by a hydrolysable linkage to a solid support at its
XX CC 3' end. It is used by reacting excess probe with a target nucleic acid;
XX CC nicking hybridised probe at least once within a predetermined sequence to
XX CC form 2 or more probe fragments hybridised to the target sequence, which
XX CC results in the probe fragments becoming hybridised to another probe; and
XX CC identifying probe fragments, so detecting the target sequence. The probe
XX CC can react with target sequence to complete a cyclizing sequence. Using this
XX CC system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can
XX CC be obt'd. The probe is cleavable at the ribonucleotides by a RNase, eg
XX CC RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)

XX SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 170
AAN92242/c
ID AAN92242 standard; DNA; 26 BP.
XX
AC AAN92242;
XX
DT 25-MAR-2003 (revised)
DT 31-OCT-2002 (revised)
DT 25-APR-1990 (first entry)
XX
DE SS probe MRCO60.
XX
KW Probe MRCO60; solid support; ribonuclease.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..12
FT /*tag= a
FT /note= "deoxyribonucleotides."
FT misc_feature 13..16
FT /*tag= b
FT /note= "ribonucleotides."
FT misc_feature 17..26
FT /*tag= c
FT /note= "deoxyribonucleotides."
XX
PN WO8910415-A.
XX
PD 02-NOV-1989.
XX
PF 25-APR-1988; 88US-00187814.
XX
PR 29-APR-1988; 88US-00187814.
XX
PA (MEIO-) MEOGENICS INC.
XX
PI Duck P, Bender R;
XX
XX WPI; 1989-339977/46.
XX
PT Detecting target nucleic acid molecules - using excess complementary
PT nucleic acid probes and nicking to complete a cycling sequence.
XX
PS Disclosure; Page 24; 34pp; English.
XX
CC Probe MRCO60 is bound by a hydrolysable linkage to a solid support at its
CC 3' end. It is used by reacting excess probe with a target nucleic acid;
CC nicking hybridised probe at least once within a predetermined sequence to
CC form 2 or more probe fragments hybridised to the target sequence, which
CC results in the probe fragments becoming hybridised to another probe; and
CC identifying probe fragments, so detecting the target sequence. The probe
CC can react with target sequence to complete a cycling sequence. Using this
CC system, sensitivity of 10 exp. -19 to 10 exp. -20 molecules of target can
CC be obt'd. The probe is cleavable at the ribonucleotides by a ds RNase, eg
CC RNase H or ExoIII. (Updated on 31-OCT-2002 to add missing OS field.)
CC (Updated on 25-MAR-2003 to correct PR field.)
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 22 T; 4 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 170
AAN92242/c
ID AAN92242 standard; DNA; 26 BP.
XX
AC AAN92242;
XX
DT 23-MAY-2001 (first entry)
XX
DE CDNA library production method related oligonucleotide SEQ ID NO: 5.
XX
KW cDNA library production; SCLA; gene chip technology;
KW differential screening; pathological diagnosis; genetic identification;
KW single-cell cDNA library amplification; ds.
XX
OS Synthetic.
XX
PN US6197554-B1.
XX
PD 06-MAR-2001.
XX
PF 20-NOV-1998; 98US-00197951.
XX
PR 20-NOV-1998; 98US-00197951.
XX
PA (LINS/) LIN S.
PA (CHUO/) CHUONG C.
PA (YING/) YING S.
XX
PI Lin S, Chuong C, Ying S;
XX
XX WPI; 2001-243448/25.
XX
PT Generating a complete full-length cDNA library from single cells for use
PT in gene chip technology, involves reverse transcribing intracellular
PT mRNAs, adding polynucleotide tail and amplifying formed cDNAs.
XX
PS Disclosure; Col 11-12; 11pp; English.
XX
CC The present invention describes a method of producing full-length cDNA
CC libraries from single cells, designated single-cell cDNA library
CC amplification (SCLA). The method is useful in gene chip technology,
CC differential screening, pathological diagnosis, physiological prognosis
CC and genetic identification. No further information about this sequence is
CC given in the specification
XX
SQ Sequence 26 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 170
AAD03682/c
ID AAD03682 standard; DNA; 26 BP.
XX
AC AAD03682;
XX
DT 19-JUN-2001 (first entry)
XX
DE Human full length zcytor13 cDNA isolating polyA PCR primer, ZC7764b.
XX
KW Human; phosphodiesterase; PDE; zcytor13; antiasthmatic; antiarthritis;
KW antipsoriatic; cyclostatic; antiatherosclerotic; antiinfertility;
KW cardiant; antiinflammatory; dermatological; wound healing; antiviral;
KW antibacterial; therapy; inflammatory bowel disease; diverticulitis;
KW spermatogenesis; sperm capacitation; immunoc contraceptive; vaccine;
KW cancer; reperfusion ischaemia; psoriasis; melanoma; myocarditis; PID;

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XX PT Polynucleotides encoding salivary proteins useful as anti-microbial
XX PS agents.
XX PS Example 1; Col 53; 29pp; English.
XX CC The invention relates to a polynucleotide derived from the 4q12-4q13
XX CC region of human chromosome 4 and encoding a zsig63 polypeptide, a
XX CC secreted salivary protein with anti-microbial activity. Due to their
XX CC microbial activity, the sequences can be used in the study of microbial
XX CC infections, e.g. for recombinant production of anti-microbial proteins.
XX CC The sequences can be used in the treatment of anti-microbial proteins.
XX CC disease, thrush, gastrointestinal disease, urinary tract infections,
XX CC vaginal infections, skin infections, epithelial wounds, chronic tissue
XX CC damage, acquired immunodeficiency syndrome (AIDS), cystic fibrosis, lung
XX CC infections, sarcoidosis, emphysema and chronic bronchitis. This sequence
XX CC represents a sequencing primer for cDNA encoding human zsig63
XX SQ Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
XX Query Match 0.9%; Score 26; DB 1; Length 26;
XX Best Local Similarity 100.0%; Pred. No. 3.2e+02;
XX Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 2708 TAAAAA..... 2733
XX Db 26 TAAAAA..... 1
XX RESULT 175
XX ABS52638/C
XX ID ABS52638 standard; DNA; 26 BP.
XX AC ABS52638;
XX XX
XX DT 15-NOV-2002. (first entry)
XX XX
XX DE Human secreted salivary protein zsig63 PCR primer ZC7764a.
XX XX
XX KW Human; secreted salivary protein; zsig63; immunogen; zsig63-cytokine;
XX KW antibody-cytokine; in vivo killing; pathological microbe; bacteria;
XX KW fungal; viral; infection; salivary gland; anti-microbial; dental caries;
XX KW tooth decay; periodontal disease; thrush; gastrointestinal disease;
XX KW urinary tract infection; vaginal infection; skin infection; microflora;
XX KW epithelial wound; pathogenic colonisation; invasion; pro-inflammatory;
XX KW chronic tissue damage; vascular system; diabetes; anti-inflammatory;
XX KW incompetent immune system; AIDS; acquired immunodeficiency syndrome;
XX KW chemotherapy; radiation treatment; lung infection; cystic fibrosis;
XX KW digestion; PCR; primer; ss.
XX XX
XX OS Homo sapiens.
XX XX
XX PN US2002081701-A1.
XX XX
XX PD 27-JUN-2002.
XX XX
XX PF 03-AUG-2001; 2001US-00922480.
XX XX
XX PR 17-MAR-1999; 99US-0124820P.
XX PR 17-MAR-2000; 2000US-00527345.
XX XX
XX PA (ADLE/) ADLER D A.
XX PA (SHEP/) SHEPPARD P O.
XX XX
XX PI Adler DA, Sheppard PO;
XX XX
XX DR WPI; 2002-635468/68.
XX XX
XX PT Novel secreted salivary protein, zsig63 and polynucleotide encoding it
XX PT useful for treating microbial infections, inflammatory conditions, dental
XX PT caries and lung infections associated with cystic fibrosis.
XX PS Example 1; Page 29; 33pp; English.

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XX CC The present invention relates to a new secreted salivary protein, zsig63.
XX CC The invention is useful for detecting in a test sample, the presence of
XX CC an antagonist or agonist of zsig63 protein activity. The invention is
XX CC also useful as an immunogen for producing an antibody to zsig63
XX CC polypeptide. zsig63-cytokine fusion proteins or antibody-cytokine fusion
XX CC protein are useful for enhancing in vivo killing of target tissues.
XX CC Pharmaceutical composition comprising purified zsig63 polypeptide are
XX CC useful in the treatment of conditions associated with pathological
XX CC microbes, including bacterial, fungal and viral infections. High
XX CC expression of zsig63 in salivary gland suggests that anti-microbial
XX CC polypeptides are useful for treatment of dental caries (tooth decay),
XX CC periodontal disease, thrush and gastrointestinal disease. Other
XX CC applications can be used in urinary tract infections, vaginal infections,
XX CC prevention of infection in skin and other epithelial wounds. The
XX CC polypeptides can be used to establish normal microflora and protect
XX CC against pathogenic colonisation and invasion. The invention is useful
XX CC when pro-inflammatory activity is desired. Applications for such pro-
XX CC inflammatory activity include the treatment of chronic tissue damage,
XX CC particularly in areas having a limited or damaged vascular system e.g.,
XX CC damage in extremities associated with diabetes. Antagonists to zsig63
XX CC polypeptides may be useful as anti-inflammatory agents. The invention is
XX CC useful for the treatment of patients having incompetent immune system,
XX CC such as AIDS (acquired immunodeficiency syndrome) patients or individuals
XX CC that have undergone chemotherapy, radiation treatment. The invention is
XX CC also useful for the treatment of lung infections associated with cystic
XX CC fibrosis and its agonists or antagonists are useful for aiding digestion.
XX CC The present nucleic acid sequence represents a PCR primer that was used
XX CC in the methods of the invention for identification of zsig63
XX SQ Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
XX Query Match 0.9%; Score 26; DB 1; Length 26;
XX Best Local Similarity 100.0%; Pred. No. 3.2e+02;
XX Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX QY 2708 TAAAAA..... 2733
XX Db 26 TAAAAA..... 1
XX RESULT 176
XX ABK66591
XX ID ABK66591 standard; DNA; 26 BP.
XX AC ABK66591;
XX XX
XX DT 02-JUL-2002 (first entry)
XX XX
XX DE Human gene specific PCR primer #679.
XX XX
XX KW Primer; ss; DNA microarray; differential expression analysis; human.
XX XX
XX OS Homo sapiens.
XX XX
XX PN US6352829-B1.
XX XX
XX PD 05-MAR-2002.
XX XX
XX PF 05-JAN-1999; 99US-00225928.
XX XX
XX PR 21-MAY-1997; 97US-00859998.
XX XX
XX PA (CLON-) CLONTECH LAB INC.
XX XX
XX PI Chenchik A, Johadze G, Bibilashvilli R;
XX XX
XX DR WPI; 2002-314699/35.
XX XX
XX PT Producing sub-population of labeled nucleic acids, useful for analyzing
XX PT differences in RNA profiles between several different physiological
XX PT sources, using set of distinct gene specific primers.
XX PS

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PS Example 3; SEQ ID NO 679; lipp; English.
XX
CC The invention relates to producing a sub-population of labeled nucleic
CC acids (NAs) comprising contacting a NA sample from a physiological
CC source, with a pool of 50 distinct gene specific primers under suitable
CC conditions to enzymatically generate sub-population of NAs, where each
CC gene specific primer has a sequence complementary to a distinct mRNA, and
CC each labeled NA is generated using a single gene specific primer. The
CC method is useful for producing a sub-population of labeled NAs which is
CC useful for analysing the differences in the RNA profiles between several
CC different physiological sources, where the method comprises producing
CC subpopulation of labeled NAs for the different physiological sources,
CC comprising the populations for each physiological source to identify
CC differences in the population, where the comparison is preferably
CC performed by hybridising the labeled NAs for each of the distinct
CC physiological sources to an array of probe NAs stably associated with the
CC surface of a substrate to produce a hybridisation pattern for each of the
CC sources, and comparing the patterns for each of the sources, where
CC differential gene expression assays are utilised in differential
CC expression analysis of diseased a normal tissue e.g. neoplastic a normal
CC tissue, or different tissue or subtype types. The present sequence is a
CC human gene specific PCR primer used in the method of the invention. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from USPTO
CC at http://wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1
XX
SQ Sequence 26 BP; 7 A; 6 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2360 AGCAAGGGTACGCTGGCGCAAGTTTCAC 2385
DB 1 AGCAAGGGTACGCTGGCGCAAGTTTCAC 26

RESULT 177
AAD45055/c
ID AAD45055 standard; DNA; 26 BP.
XX
AC AAD45055;
XX
DT 27-DEC-2002 (first entry)
XX
DE ZC7764a primer used in the identification of human zsig63 DNA.
XX
KW Human; secreted salivary protein; zsig63 protein; host defense protein;
KW immune modulating factor; antipathogenic; cell-cell signalling molecule;
KW growth factor; cytokine; growth factor hormone activity; dental carries;
KW infection; tooth decay; periodontal disease; gastrointestinal disease;
KW thrush; urinary tract infection; vaginal infection; diabetes; obesity;
KW anti-inflammatory; chronic tissue damage; lung dysfunction; restenosis;
KW gene therapy; salivary gland dysfunction; prostate gland dysfunction;
KW forensic DNA profiling; chondrosarcoma; atherosclerosis; primer; ss.
XX
OS Homo sapiens.
XX
PN US2002090677-A1.
XX
PD 11-JUL-2002.
XX
PF 03-AUG-2001; 2001US-00923236.
XX
PR 17-MAR-1999; 99US-0124820P.
PR 17-MAR-2000; 2000US-00527345.
XX
PA (ADLE/) ADLER D A.
PA (SHEP/) SHEPPARD P O.
XX
PI Adler DA, Sheppard PO;
XX
DR WPI; 2002-642378/69.

XX Novel secreted salivary polypeptide, zsig63, useful as antimicrobial
PT agent for treating microbial infection, dental carries, periodontal
PT disease, thrush gastrointestinal disease, and for aiding digestion.
PS
XX Example 1; Page 30; 33pp; English.
XX
CC The invention relates to human secreted salivary polypeptide designated
CC as zsig63 and nucleic acid molecules encoding such polypeptides. zsig63
CC can be used in detecting agonists and antagonists of its activity, and is
CC also useful as a host defense polypeptide, immune modulating factor,
CC antipathogenic polypeptide, cell-cell signalling molecule, growth factor,
CC cytokine, or as secreted extracellular matrix associated proteins with
CC growth factor hormone activity. It is useful for treating conditions
CC associated with pathological microbes, including bacterial, fungal and
CC viral infections, for treating dental carries (tooth decay), periodontal
CC disease, thrush and gastrointestinal disease, for treating urinary tract
CC infection, vaginal infection and for preventing infection in skin and
CC other epithelial wounds. zsig63 is useful for establishing normal
CC microflora and protect against pathogenic colonisation and invasion, for
CC treating chronic tissue damage e.g. damage in extremities associated with
CC diabetes and useful as anti-inflammatory agents. It is useful as a marker
CC of lung dysfunction, salivary gland dysfunction, or dysfunction of
CC prostate gland. It is also therapeutically useful for aiding digestion.
CC Polynucleotides of the invention are used in gene therapy for increasing
CC or inhibiting zsig63 activity, for detecting abnormalities on human
CC chromosome 4 associated with disease or other human traits and as
CC diagnostics in forensic DNA profiling. Sequences of the invention are
CC useful for stimulating proliferation or differentiation of cardiac
CC myocytes, for proliferation or differentiation of adipocytes and for
CC inhibiting chondrosarcomas, atherosclerosis, restenosis and obesity. The
CC present sequence is a primer used in the identification of human zsig63
CC DNA
XX
SQ Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAAAAAAAAAAAAAA 2733
DB 26 TAAAAAATAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 178
AAS20671/c
ID AAS20671 standard; DNA; 26 BP.
XX
AC AAS20671;
XX
DT 09-APR-2002 (first entry)
XX
DE Human zalphall Ligand sequencing primer ZC7764a.
XX
KW Cytokine; zalphall Ligand; zalphall receptor; NK cell progenitor;
KW natural killer cell proliferation; T-cell proliferation;
KW B-cell proliferation; anti-tumour response; immune system;
KW immunostimulant; cytostatic; human; sequencing primer; ss.
XX
OS Homo sapiens.
XX
PN US6307024-B1.
XX
PD 23-OCT-2001.
XX
PF 09-MAR-2000; 2000US-00522217.
XX
PR 09-MAR-1999; 99US-0123547P.
PR 11-MAR-1999; 99US-0123904P.
PR 01-JUL-1999; 99US-0142013P.
XX
PA (ZYMO ) ZYMOGENETICS INC.

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XX PI Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;
XX PI Gross JA, Johnson JV, Nelson AJ, Dillon SR, Hammond AK;
XX DR WPI; 2002-040208/05.
XX
XX New zalphall ligand polypeptides and polynucleotides, useful for
XX stimulating proliferation, activation, differentiation and/or induction
XX of inhibition of specialized cell function, or for stimulating an
XX antigenic response.
XX
XX Example 7; Col 139; 105pp; English.
XX
XX The present invention relates to the isolation of a novel cytokine,
XX zalphall ligand and the polynucleotide encoding it. The invention also
XX gives the sequence for the zalphall receptor and the polynucleotide
XX encoding it. The zalphall ligand polypeptide stimulates proliferation of
XX natural killer (NK) cells or NK cell progenitors, the activation of NK
XX cells, proliferation of T-cells, proliferation of B-cells stimulated with
XX anti-CD40 antibodies, stimulates an antigenic response in a mammal, and
XX reduces proliferation of B-cells stimulated with anti-IGM antibodies. The
XX zalphall ligand polypeptide is also useful in preparing antibodies that
XX bind to zalphall ligand epitopes. The zalphall ligand polynucleotides can
XX be used as probes or primers to clone regions of a zalphall ligand gene,
XX and in gene therapy. Zalphall ligand may also be used to identify
XX inhibitors of its activity, to enhance the generation of anti-tumour
XX responses with or without the infusion of donor lymphocytes, and to
XX activate or stimulate the immune system. The present sequence represents
XX a sequencing primer used to sequence cDNA clones in the isolation of
XX human zalphall ligand
XX
XX SQ Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 26; DB 1; Length 26;
XX Best Local Similarity 100.0%; Pred. No. 3.2e+02;
XX Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAA..... 2733
XX Db 26 TAAAAA..... 1
XX
XX RESULT 179
XX AAD43853/C
XX ID AAD43853 standard; DNA; 26 BP.
XX
XX AC AAD43853;
XX
XX DT 14-NOV-2002 (first entry)
XX
XX DE Primer #2 used to illustrate the method of the invention.
XX
XX KW Single stranded polynucleotide tag; cleavage agent; gene expression;
XX KW primer; ss.
XX
XX OS Unidentified.
XX
XX PN WO200259357-A2.
XX
XX PD 01-AUG-2002.
XX
XX PF 24-JAN-2002; 2002WO-DK000052.
XX
XX PR 24-JAN-2001; 2001DK-00000126.
XX
XX PR 12-FEB-2001; 2001US-0267704P.
XX
XX PA (GENO-) GENOMIC EXPRESSION APS.
XX
XX PI Pedersen ML;
XX
XX DR WPI; 2002-636542/68.
XX
XX Obtaining single stranded polynucleotide tags from a biological sample,

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PT for analyzing gene expression or diagnosing clinical conditions,
PT comprises employing nicking endonucleases that cleave complementary
PT strands.
XX
XX Example; Page 294; 302pp; English.
XX
XX The invention relates to a method for obtaining a single stranded
XX polynucleotide tag from a biological sample by cleaving one of the
XX complementary strands of a double stranded polynucleotide with a cleavage
XX agent capable of recognising a double stranded polynucleotide comprising
XX complementary strands and cleaving only one of the strands of the
XX polynucleotide in the process of generating a single stranded
XX polynucleotide tag. The method is useful for separating, analysing,
XX quantifying or obtaining single stranded polynucleotides comprising tags
XX originating partly, and preferably wholly from a source of DNA and/or RNA
XX in a sample comprising biological cells. The method is particularly for
XX analysing gene expression (expression profiling or differential gene
XX expression), or in diagnosing clinical conditions. The present sequence
XX is a primer used in the exemplification of the invention
XX
XX SQ Sequence 26 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 26; DB 1; Length 26;
XX Best Local Similarity 100.0%; Pred. No. 3.2e+02;
XX Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAA..... 2734
XX Db 26 AAAAAA..... 1
XX
XX RESULT 180
XX ABZ24784/C
XX ID ABZ24784 standard; DNA; 26 BP.
XX
XX AC ABZ24784;
XX
XX DT 07-APR-2003 (first entry)
XX
XX DE Oligodeoxynucleic acid molecule ODN 24.
XX
XX KW Immunostimulant; oligodeoxynucleic acid; ODN; vaccine; DNA-RNA hybrid;
XX KW ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX modified_base 1..26
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "thiophosphate backbone"
XX
XX PN WO200295027-A2.
XX
XX PD 28-NOV-2002.
XX
XX PF 17-MAY-2002; 2002WO-EP005448.
XX
XX PR 21-MAY-2001; 2001AT-00000805.
XX
XX PA (INTE-) INTERCELL BIOMEDIZINISCHE FORSCHUNGS.
XX PA (CIST-) CISTEM BIOTECHNOLOGIES GMBH.
XX
XX PI Lingnau K, Schellack C, Schmidt W;
XX
XX DR WPI; 2003-183880/18.
XX
XX New oligodeoxynucleic acid molecules useful for the preparation of
XX vaccine.
XX
XX Example 8; Page 32; 57pp; English.
XX
XX The present sequence is that of a thiosubstituted oligodeoxynucleic acid

```

CC (ODN) molecule, ODN 24, including deoxyuridine monophosphates. The
 CC invention is based on the discovery that ODNs containing deoxyuridine
 CC residues (U-ODNs) have an immunostimulatory effect comparable to, or in
 CC many instances greater than, ODNs containing CpG motifs, producing higher
 CC numbers of specific T cells to a given antigen. The U-ODNs do not induce
 CC the systemic production of pro-inflammatory cytokines and, in contrast to
 CC CpG ODNs, are not dependent on a specific motif or a palindromic
 CC sequence. Use of a U-ODN for the preparation of a vaccine is claimed.
 CC Combining the U-ODN with an antigen strongly increases the potential of
 CC the antigen to raise the protection/immune response of a vaccinated
 CC individual. An example of the invention demonstrated the generation of a
 CC specific immune response against a melanoma-derived peptide (see
 CC ABP58360) by injection of mice with the peptide in combination with ODN
 CC 24
 XX
 SQ Sequence 26 BP; 0 A; 0 C; 0 G; 1 T; 25 U; 0 Other;
 Query Match 0.9%; Score 26; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
 Db 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 181
 ABX93599/c
 ID ABX93599 standard; DNA; 26 BP.
 XX
 AC ABX93599;
 XX
 DT 28-MAY-2003 (first entry)
 XX
 DE Human zsig63 PCR/sequencing primer ZC7764a.
 KW ss; PCR; zsig63; adhesion; salivary gland; dental carries;
 KW periodontal disease; thrush; gastrointestinal disease; epithelial wound;
 KW urinary tract infection; vaginal infection; skin infection; primer;
 KW pro-inflammatory; chronic tissue damage; vascular system; diabetes; AIDS;
 KW lung infection; cystic fibrosis; lung dysfunction; digestive;
 KW salivary gland carcinoma; Pneumocystis carinii infection; emphysema;
 KW chronic bronchitis; prostate dysfunction; prostate adenocarcinoma;
 KW cell culture media; gene therapy; human chromosome 4q12-4q13;
 KW dentinogenesis imperfecta; dentin dysplasia type II.
 OS Synthetic.
 XX
 PN US2002173027-A1.
 XX
 PD 21-NOV-2002.
 XX
 XX 03-AUG-2001; 2001US-00922469.
 XX
 PF 17-MAR-1999; 99US-0124820P.
 PR 17-MAR-2000; 2000US-00527345.
 XX
 XX (ADLER/) ADLER D A.
 PA (SHEP/) SHEPPARD P O.
 XX
 PI Adler DA, Sheppard PO;
 XX
 XX WPI; 2003-328428/31.
 XX
 XX Novel isolated zsig63 polypeptide, member of the adhesion family, useful
 XX for treating dental carries, periodontal disease, thrush,
 PT gastrointestinal disease, urinary tract infections, vaginal infections,
 PT skin infections.
 XX
 XX Example 1; Page 29; 32pp; English.
 PS
 XX The invention relates to an isolated zsig63 polypeptide comprising at
 CC least 90% identity to an amino acid sequence which comprises domain 1 of

CC zsig63, domain 2, domain 3, mature zsig63 and full length zsig3. Also
 CC included are the polynucleotide encoding zsig63, a zsig63 expression
 CC vector, a cultured cell comprising the vector and expressing the protein,
 CC a DNA encoding a fusion protein (comprising amino acids 1-15, 16-37, 38-
 CC 126, 127-219 or 16-219 of zsig63 and an additional protein), using a
 CC zsig63 reporter gene construct to identify zsig63 agonists, and producing
 CC an anti-zsig63 antibody using zsig63 immunogenic peptides, zsig63 is
 CC useful for detecting in a test sample, the presence of antagonist of
 CC zsig63 protein activity. Zsig63 has antimicrobial activity and since
 CC exhibits high expression in salivary gland, can be used for treating
 CC dental carries, periodontal disease, thrush, and gastrointestinal
 CC disease, urinary tract infections, vaginal infections, skin infections
 CC and other epithelial wounds. The polypeptides can be used to establish
 CC normal microflora and protect against pathogenic colonization and
 CC invasion. Zsig63 can also be used for providing pro-inflammatory activity
 CC for treating chronic, tissue damage particularly in areas having limited
 CC or damaged vascular system, e.g. in diabetes, and for treating
 CC immunocompromised AIDS patients or in individuals that have undergone
 CC chemotherapy, radiation treatment, for treating lung infections e.g. in
 CC cystic fibrosis. Detection of zsig63 polypeptide at relatively high
 CC levels in the trachea may indicate that such polypeptides may serve as a
 CC marker of lung dysfunction. Zsig63 is also useful in diagnosing
 CC conditions associated with salivary gland or lung dysfunction including
 CC salivary gland carcinoma, Pneumocystis carinii infection, emphysema,
 CC chronic bronchitis, prostate dysfunctions such as prostate
 CC adenocarcinoma, aiding digestion, and as components of defined cell
 CC culture media and may be used to replace serum that is commonly used in
 CC culture. The DNA is useful in gene therapy applications to increase or
 CC inhibit zsig63 activity, and for detecting abnormalities on human
 CC chromosome 4 (e.g. 4q12-4q13, associated with dentinogenesis imperfecta,
 CC and dentin dysplasia type II). Zsig63 is an adhesion family member. The
 CC present sequence is a primer used to isolate and sequence nucleic acids
 CC encoding human zsig63
 XX
 SQ Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
 Query Match 0.9%; Score 26; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 Db 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 182
 ACA62282/c
 ID ACA62282 standard; DNA; 26 BP.
 XX
 AC ACA62282;
 XX
 DT 12-AUG-2003 (first entry)
 XX
 DE Oligo (dT) primer #1.
 XX
 XX ss; PCR; primer; antisense therapy; mRNA expression profile;
 KW promoter containing primer.
 KW
 XX Synthetic.
 OS
 XX US2003022318-A1.
 PN
 XX 30-JAN-2003.
 PD
 XX 07-SEP-2001; 2001US-00949305.
 PF
 XX 25-JAN-2000; 2000US-00494212.
 PR
 XX (EPIC-) EPICLONE INC.
 PA
 XX Lin S, Ying S;
 PI
 XX WPI; 2003-479488/45.
 XX

XX Improved polymerase thermocycling reaction for nucleic acid
 PT amplification, by thermal cycling of promoter-linked nucleic acid
 PT template synthesis and in vitro transcriptional amplification of nucleic
 PT acid sequences.

PS Example 4; Page 14; 28pp; English.

XX The invention relates to an improved polymerase thermocycling reaction
 CC (M1) for linear amplification of nucleic acid sequences, involves
 CC denaturing a number of nucleic acid templates (I), combining the
 CC denatured (I) with a promoter-containing primer (P1), a primer (P2), a
 CC number of deoxynucleotide triphosphates and ribonucleotide triphosphates,
 CC a reverse transcription enzyme, a DNA-dependent DNA polymerase and RNA
 CC containing templates, denaturing the promoter-containing templates,
 CC contacting P2 with the denatured promoter-containing templates to
 CC generate a number of promoter-containing double-stranded templates,
 CC where the double-stranded nucleic acid templates are flanked by P1 in one
 CC end and P2 in the other end of the other orientation, transcribing the
 CC promoter-containing double-stranded DNA templates to form a number of
 CC amplified RNA sequences, including the primer region of the promoter-
 CC containing double-stranded DNA templates, contacting the amplified RNA
 CC sequences with P2 to form a number of cDNAs and a number of DNA-RNA
 CC hybrid templates, and denaturing the DNA-RNA hybrid templates. The method
 CC is useful for improved polymerase thermocycling reaction for linear
 CC amplification of nucleic acid sequences, and thus for producing mRNA
 CC expression profile of a cell by M1 to generate multiple copies of the
 CC mRNA. M1 is also useful for determining aberrant protein production of
 CC cells in a diseased state, by generating an expression profile by the
 CC above method, of cells in both normal and diseased states, comparing the
 CC expression profile of the cells in the normal and diseased states,
 CC determining the differences in mRNA composition of the cell(s) in the
 CC diseased state, isolating the mRNA sequences of cell(s) in the diseased
 CC state that differ from mRNA in cell(s) in non-diseased state, amplifying
 CC the isolated mRNA by M1, and determining aberrant protein function of the
 CC protein coded for by the isolated mRNA. M1 is also useful for treating a
 CC cell in a diseased state caused by aberrant protein production, by
 CC determining protein expression of a cell in a diseased state, determining
 CC the mRNA sequence for the aberrant proteins, synthesising an antisense
 CC sequence of the mRNA, amplifying the antisense mRNA sequences by M1, and
 CC delivering a pharmaceutically effective dosage of a composition
 CC comprising the anti-sense mRNA and a compatible lipid based biological
 CC carrier. M1 is also useful for predicting the efficacy of a proposed drug
 CC targeted against an aberrant protein, by determining aberrant protein
 CC production of cell in a diseased state by the above method, amplifying
 CC the aberrant protein by M1 and using recombinant techniques to determine
 CC the effect of proposed drug on the aberrant protein. M1 is also useful
 CC for differential screening of tissue-specific gene expression at a
 CC cellular level, for preparing labeled RNA/DNA probes for a gene chip
 CC technology, and for determining the efficacy of a drug regimen against a
 CC gene or its cDNAs. The present sequence is an Oligo (dT) primer used to
 CC produce second strand cDNA in the method of the invention

XX Sequence 26 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2734
 Db 26 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 183
 ADH44608/c

XX ADH44608 standard; DNA; 26 BP.

AC ADH44608;

XX 25-MAR-2004 (first entry)

XX

Human cDNA encoding Zalphall sequencing primer #2.

Human; ss; Zalphall ligand; Zalphall receptor; immune response;
 tumour progression; metastasis; tumour stasis; haematopoietic tumour;
 lymphoma; B cell tumour; systemic lupus erythematosus;
 rheumatoid arthritis; myasthenia gravis; diabetes; infectious disease;
 immunocompromised patient; HIV infection; vaccine; primer.

Homo sapiens.

OS

US6605272-B2.

12-AUG-2003.

03-AUG-2001; 2001US-00923246.

09-MAR-1999; 99US-0123547P.

11-MAR-1999; 99US-0123904P.

01-JUL-1999; 99US-0142013P.

09-MAR-2000; 2000US-00522217.

(ZYMO) ZYMOGENETICS INC.

Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;

Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;

WPI; 2003-895283/82.

Example 7; SEQ ID NO 38; 103pp; English.

The invention relates to stimulating an immune response in a mammal exposed to an antigen or pathogen, useful for enhancing anti-tumor activity resulting in reduced tumor progression or metastasis, comprises administering zalphall ligand polypeptide.

XX The invention relates to stimulating an immune response in a mammal exposed to an antigen or pathogen comprising administering a composition comprising mature zalphall ligand polypeptide comprising residues 32-162 of ADH44572 in a pharmaceutical vehicle. Also included are stimulating an immune response in a mammal exposed to an antigen or pathogen (comprising: (a) determining (in)directly the level of antigen or pathogen present in the mammal; (b) administering a composition comprising zalphall ligand polypeptide in a pharmaceutical vehicle; (c) determining (in)directly the level of antigen or pathogen in the mammal; and (d) comparing the antigen or pathogen level in (a) with (b), where a change in the level indicates stimulation of immune response), and stimulating an immune response in a mammal exposed to an antigen or pathogen (comprising: (a) determining a level of antigen- or pathogen-specific antibody; (b) administering a composition comprising zalphall ligand polypeptide in a pharmaceutical vehicle; (c) determining a post administration level of the antigen- or pathogen-specific antibody; and (d) comparing the level of the antibody in (a) with (b), where an increase in the antibody level indicates stimulation of immune response). The method is useful for stimulating an immune response in a mammal exposed to an antigen or pathogen, and for enhancing anti-tumour activity resulting in a reduction in tumour progression, decrease in metastasis, or tumour stasis. The tumour may be a haematopoietic tumour, a lymphoma or a B cell tumour. The zalphall ligand is useful for treating a wide range of diseases arising from defects in the immune system, e.g. systemic lupus erythematosus, rheumatoid arthritis, myasthenia gravis, or diabetes, for boosting immunity to infectious diseases, treating immunocompromised patients, such as HIV+ patients and in improving vaccines. The present sequence is a sequencing primer used in the exemplification of the invention.

Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2733
 |||||||||||||||||||||||||||||

Db 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 184
ADI00944/c
ID ADI00944 standard; DNA; 26 BP.
XX
XX ADI00944;
AC
XX
XX 22-APR-2004 (first entry)
DT
XX Sequencing primer SEQ 38 used to analyse human zalphall ligand clone DNA.
DE
XX zalphall ligand; immunity; infectious disease; immunocompromised patient;
KW HIV; vaccine; human; ss; PCR; primer.
XX
XX Homo sapiens.
OS
XX US2003125524-A1.
PN
XX 03-JUL-2003.
PD
XX
XX 15-NOV-2002; 2002US-00295723.
PF
XX
XX 09-MAR-2000; 2000US-00522217.
PR
XX (ZYMO) ZYMOGENETICS INC.
PA
XX Novak JE, Preenell SR, Sprecher CA, Foster DC, Holly RD;
PI Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
PI
XX WPI; 2003-811003/76.
DR
XX
XX New zalphall ligand polypeptides, useful for boosting immunity to
PT infectious diseases, and treating immunocompromised patients, such as
PT human immunodeficiency virus (HIV) patients, or in improving vaccines.
PT
XX
XX Example 7; SEQ ID NO 38; 113pp; English.
PS
XX
XX The invention relates to a novel isolated zalphall ligand polypeptide.
CC The polypeptide of the invention may be useful for boosting immunity to
CC infectious diseases and treating immunocompromised patients, such as HIV
CC patients, as well as in improving vaccines. The current sequence is that
CC of the PCR primer which was used in the exemplification of the invention.
CC
XX
XX Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 185
ADO47862/c
ID ADO47862 standard; DNA; 26 BP.
XX
XX ADO47862;
AC
XX
XX 29-JUL-2004 (first entry)
DT
XX Gene expression inhibition associated poly(dT)-26mer primer.
DE
XX
XX gene expression; gene expredasion inhibition;
KW eukaryotic cell characteristic; cell division rate; pigmentation; cancer;
KW microbial infection; viral pathogenic infection;
KW cancer cell proliferation; poly(dT)-26mer primer; ss; primer.
XX
XX Synthetic.
OS
XX

PN US2004087526-A1.
XX
PD 06-MAY-2004.
XX
XX 19-MAR-2003; 2003US-00393450.
PF
XX 12-NOV-2001; 2001US-0351183P.
PR
XX 18-JAN-2002; 2002US-00052486.
PR
XX (LINS/) LIN S.
PA (JIHH/) JI H H.
PA
XX Lin S, Ji HH;
PI
XX WPI; 2004-356242/33.
DR
XX
XX Composition useful for inhibiting the expression of a targeted gene in a
PT substrate, and for altering a characteristic of a eukaryote, comprises a
PT DNA-RNA hybrid.
PT
XX
XX Example 5; SEQ ID NO 6; 40pp; English.
PS
XX
XX The invention describes a composition (I) for inhibiting the expression of
CC a targeted gene in a substrate, comprising a DNA-RNA hybrid. (I) is
CC useful for inhibiting the expression of the targeted gene in a substrate.
CC The substrate is a prokaryote such as a viral or bacterial cell, or
CC eukaryote or the cell of the eukaryote such as a vertebrate. The
CC eukaryote is a mouse, rat, chimpanzee, preferably a human being. (I) is
CC useful for altering the characteristics of an eukaryotic cell. The
CC characteristic is chosen from expression of a protein, cell division rate
CC and pigmentation. (I) has an effect that lasts at least three days. (I)
CC is useful to inhibit the expression of messenger RNA in a cell. The
CC messenger RNA is transcribed from a gene chosen from viral gene,
CC oncogene, enzyme. (I) is useful for suppressing cancers, by knocking out
CC cancer related genes, for preventing and treating microbial infections,
CC preferably reducing viral pathogenic infection and for reducing the
CC proliferation of cancer cells. This sequence represents a poly(dT)-26mer
CC primer used in the creation of DNA-RNA hybrids for controlling gene
CC expression.
XX
XX Sequence 26 BP; 0 A; 0 C; 0 G; 26 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 26 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 186
ADP19767/c
ID ADP19767 standard; DNA; 26 BP.
XX
XX ADP19767;
AC
XX
XX 26-AUG-2004 (first entry)
DT
XX Human zalphall ligand PCR primer seqid 38.
DE
XX
XX cytostatic; zalphall ligand; pharmaceutical; cancer; immune response;
KW melanoma; tumour; solid tumour; haematopoietic tumour; lymphoma; human;
KW PCR; primer; ss.
XX
XX Homo sapiens.
OS
XX
XX US2004110932-A1.
PN
XX 10-JUN-2004.
PD
XX
XX 10-SEP-2003; 2003US-00659684.
PF
XX

PI Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
 XX WPI; 2005-038783/04.
 XX
 XX New zalpha 11 Ligand fusion protein, useful for stimulating the
 PT proliferation and/or development of hematopoietic cells in vitro and in
 PT vivo, and in autologous marrow culture.
 XX
 XX Example 7; SEQ ID NO 38; 110pp; English.
 XX
 CC The invention comprises a fusion protein that contains a zalphall ligand
 CC and a cytokine polypeptide (e.g. IL-2, IL-4, IL-15 or GM-CSF), the fusion
 CC protein of the invention binds to the human receptor protein. The protein
 CC of the invention is useful for stimulating the proliferation and/or
 CC development of hematopoietic cells. The protein of the invention is also
 CC useful in autologous marrow culture. The present DNA sequence represents
 CC a PCR primer that was used in an example of the invention.
 XX
 XX Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
 SQ
 Query Match 0.9%; Score 26; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 DB 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 189
 ADY96657/C
 ID ADY96657 standard; DNA; 26 BP.
 XX
 XX AC ADY96657;
 XX
 XX 02-JUN-2005 (first entry)
 XX
 DE Human Zsig63 cDNA cloning and sequencing primer, ZC7764a.
 XX
 XX Zsig63; microbial infection; tooth disease; antibacterial; mouth disease;
 XX dental carries; candida infection; fungicide; infection;
 KW periodontal disease; antiinflammatory; mouth disease;
 KW gastrointestinal disease; gastrointestinal-gen.; urinary tract infection;
 KW antimicrobial; uropathic; genitourinary disease;
 KW female genital tract infection; antimicrobial; gynecology and obstetrics;
 KW skin infection; dermatological; dermatological disease; wound healing;
 KW vulnery; injury; acquired immune deficiency syndrome; anti-hiv;
 KW immune disorder; cancer; cytostatic; neoplasm; lung infection;
 KW antimicrobial; respiratory-gen.; respiratory disease; gene therapy;
 KW primer; ss.
 XX
 XX Homo sapiens.
 XX
 XX US2005065322-A1.
 XX
 XX 24-MAR-2005.
 XX
 XX 20-OCT-2004; 2004US-00969164.
 XX
 XX 17-MAR-1999; 99US-0124820P.
 PR 17-MAR-2000; 2000US-00527345.
 PR 03-AUG-2001; 2001US-00923236.
 XX
 XX (ZYMO) ZYMOGENETICS INC.
 XX
 XX Adler DA, Sheppard PO;
 PI
 XX WPI; 2005-241320/25.
 XX
 XX New polynucleotide (I) encoding a zsig63 polypeptide, useful for
 PT diagnosing and treating microbial infections, e.g. dental carries,
 PT thrush, gastrointestinal disease, skin infection, or epithelial wounds,
 PT AIDS, lung infections, or cancer.

XX Example 1; SEQ ID NO 7; 33pp; English.
 PS
 XX
 CC The present invention relates to zsig63, a novel secreted salivary
 CC protein and its encoding polynucleotide. Zsig63 is a member of the
 CC adhesin family. The invention is useful for diagnosing and treating
 CC microbial infections such as dental carries, periodontal disease, thrush,
 CC gastrointestinal disease, urinary tract infection, vaginal infection,
 CC skin infection or epithelial wounds and lung disfunctions such as AIDS.
 CC Lung infections and cancer. The invention is also useful in gene therapy.
 CC The present sequence is human Zsig63 cDNA cloning and sequencing primer.
 CC This sequence is used in the identification of Zsig63 using an EST
 CC sequence to obtain the full-length Zsig63.
 XX
 XX Sequence 26 BP; 1 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
 SQ
 Query Match 0.9%; Score 26; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.2e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 DB 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 190
 AEE86842
 ID AEE86842 standard; DNA; 26 BP.
 XX
 XX AC AEE86842;
 XX
 XX 23-FEB-2006 (first entry)
 XX
 XX DE Novel solid phase-related oligonucleotide Oligo dA26-Cy3 #17.
 XX
 KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= Cy3"
 XX DE102004025746-A1.
 XX 15-DEC-2005.
 XX 26-MAY-2004; 2004DE-10025746.
 XX
 XX 26-MAY-2004; 2004DE-10025746.
 XX
 XX (CHER/) CHERKASOV D.
 PA (HENN/) HENNIG C.
 PA (GENO-) GENOVOXX GMBH.
 XX
 XX Cherkasov D, Hennig C, Baeuml E;
 PI WPI; 2006-040183/05.
 XX
 XX Parallel sequencing of nucleic acids by optical methods, by cyclic primer
 PT -matrix extension, using a solid phase with reduced non-specific binding
 PT of labeled components.
 XX
 XX Disclosure; Page 97; 144pp; German.
 PS
 XX This invention relates to a novel method for parallel sequence analysis
 CC of nucleic acids (NA) by optical means using a novel solid phase (SP).
 CC The SP is useful for multiple parallel sequencing of nucleic acids and
 CC shows reduced non-specific binding of labeled or unlabeled nucleotides
 CC and nucleic acids, so the background remains low even after prolonged and
 CC repeated contact of the solid phase with high concentrations of labeled


```
CC reagents. The present sequence is that of an oligonucleotide which was
CC used in the development of the novel method of the invention.
XX
SQ Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 191
AEE86828
ID AEE86828 standard; DNA; 26 BP.
XX
AC AEE86828;
XX
DT 23-FEB-2006 (first entry)
XX
DE Novel solid phase-related oligonucleotide Oligo dA26-Cy3 #3.
XX
KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= OTHER
FT /*note= "OTHER= Cy3"
XX
PN DE102004025746-A1.
XX
PD 15-DEC-2005.
XX
PF 26-MAY-2004; 2004DE-10025746.
XX
PR 26-MAY-2004; 2004DE-10025746.
XX
PA (CHERN/) CHERKASOV D.
PA (HENN/) HENNIG C.
PA (GENO-) GENOVXX GMBH.
XX
PI Cherkasov D, Hennig C, Baeuml E;
XX
DR WPI; 2006-040183/05.
XX
PT Parallel sequencing of nucleic acids by optical methods, by cyclic primer
PT -matrix extension, using a solid phase with reduced non-specific binding
PT of labeled components.
XX
PS Disclosure; Page 97; 144pp; German.
XX
CC This invention relates to a novel method for parallel sequence analysis
CC of nucleic acids (NA) by optical means using a novel solid phase (SP).
CC The SP is useful for multiple parallel sequencing of nucleic acids and
CC shows reduced non-specific binding of labeled or unlabeled nucleotides
CC and nucleic acids, so the background remains low even after prolonged and
CC repeated contact of the solid phase with high concentrations of labeled
CC reagents. The present sequence is that of an oligonucleotide which was
CC used in the development of the novel method of the invention.
XX
SQ Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 192
AEE86844
ID AEE86844 standard; DNA; 26 BP.
XX
AC AEE86844;
XX
DT 23-FEB-2006 (first entry)
XX
DE Novel solid phase-related oligonucleotide Oligo dA26-Cy3 #2.
XX
KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= OTHER
FT /*note= "OTHER= Cy3"
XX
PN DE102004025745-A1.
XX
PD 15-DEC-2005.
XX
PF 26-MAY-2004; 2004DE-10025745.
XX
PR 26-MAY-2004; 2004DE-10025745.
XX
PA (HENN/) HENNIG C.
PA (GENO-) GENOVXX GMBH.
PA (CHERN/) CHERKASOV D.
XX
PI Cherkasov D, Hennig C;
XX
DR WPI; 2006-040182/05.
XX
PT Surface of solid phase, useful for parallel, optical analysis of many
PT nucleic acids, has reduced non-specific binding of labeled components.
XX
PS Disclosure; Page 62; 88pp; German.
XX
CC This invention relates to a novel surface of a solid phase (SP), useful
CC in methods for parallel analysis of many individual nucleic acids (NA) by
CC optical methods. The novel SP is useful for multiple parallel sequencing
CC of nucleic acids and shows reduced non-specific binding of labeled or
CC unlabeled nucleotides and nucleic acids. The present sequence is that of
CC an oligonucleotide which was used in the development of the novel solid
CC phase of the invention.
XX
SQ Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 193
AEE86858
ID AEE86858 standard; DNA; 26 BP.
XX
AC AEE86858;
XX
DT 23-FEB-2006 (first entry)
XX
DE Novel solid phase-related oligonucleotide Oligo dA26-Cy3 #16.
XX
```

```
KW DNA chip; biochip; DNA detection; DNA microarray; DNA sequencing; ss.
XX Synthetic.
OS
XX
XX Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= Cy3"
XX
XX DE102004025745-A1.
XX
XX
XX PD 15-DEC-2005.
XX
XX 26-MAY-2004; 2004DE-10025745.
XX
XX 26-MAY-2004; 2004DE-10025745.
XX
XX (HENN/) HENNIG C.
XX (GENO-) GENOVXX GMBH.
XX (CHER/) CHERKASOV D.
XX
XX Cherkasov D, Hennig C;
XX
XX WPI; 2006-040182/05.
XX
XX Surface of solid phase, useful for parallel, optical analysis of many
XX nucleic acids, has reduced non-specific binding of labeled components.
XX
XX Disclosure; Page 62; 88pp; German.
XX
XX This invention relates to a novel surface of a solid phase (SP), useful
XX in methods for parallel analysis of many individual nucleic acids (NA) by
XX optical methods. The novel SP is useful for multiple parallel sequencing
XX of nucleic acids and shows reduced non-specific binding of labeled or
XX unlabeled nucleotides and nucleic acids. The present sequence is that of
XX an oligonucleotide which was used in the development of the novel solid
XX phase of the invention.
XX
XX Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 26; DB 1; Length 26;
XX Best Local Similarity 100.0%; Pred. No. 3.2e+02;
XX Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2734
XX |
XX 1 AAAAAAAAAAAAAAAAAAAAAAAAAA 26
XX
XX RESULT 194
XX AEF12154
XX ID AEF12154 standard; DNA; 26 BP.
XX
XX AC AEF12154;
XX
XX 09-MAR-2006 (first entry)
XX
XX DE Oligonucleotide dA26-Cy3.
XX
XX DNA detection; DNA sequencing; primer; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX /mod_base= OTHER
XX /note= "labelled with Cy3"
XX
XX DE102004025744-A1.
XX
XX 29-DEC-2005.
```

```
XX 26-MAY-2004; 2004DE-10025744.
XX
XX 26-MAY-2004; 2004DE-10025744.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVXX GMBH.
XX
XX Cherkasov D, Hennig C;
XX
XX WPI; 2006-081126/09.
XX
XX Surface of a solid support, useful for multiple parallel analysis of
XX nucleic acids by optical methods, having low non-specific binding of
XX labeled components.
XX
XX Disclosure; Page 62; 88pp; German.
XX
XX This invention describes a novel solid support surface for parallel
XX analysis of many individual nucleic acids by optical methods. The
XX invention also describes; a) a solid phase in which the surface shows
XX reduced non-specific binding of labeled components; b) methods for
XX preparing the novel solid support and c) methods of parallel analysis of
XX many nucleic acid by optical methods, using the solid support. The
XX surface of the solid support is made of silica, glass, silicon dioxide or
XX Si-OH; is flat and has nucleic acid chains fixed to it, optionally
XX through a linker. The solid phase is preferably part of a device that
XX allows fluid exchange and it is permeable to light in the wavelength
XX regions 200-400; 200-2000 or 400-800 nm. An external layer of solid
XX support is removed, then the nucleic acid is coupled to it, optionally
XX after attachment of a linker layer. Alternatively, after removing the
XX external layer, nucleic acids are synthesized on the surface by cyclic
XX coupling, optionally after attachment of a linker, and in either case,
XX additional substances (specifically phosphate, sulfate or carboxy-
XX containing monomers or polymers) can be coupled to the surface, after
XX attachment or synthesis of nucleic acids. Only part of the surface is
XX removed, particularly by a chemical reaction with hydrofluoric acid or
XX sodium hydroxide, especially to remove a layer 1 nm to 100 micron thick.
XX Particularly after removal of the surface layer, the surface is not dried
XX and all subsequent steps are done in a liquid phase. The nucleic acids
XX analyzed represent a single population or many different populations and
XX contains 5-50, 20-200 or 50-500 nucleotides. The linker is 1-50 nm long
XX and is e.g. a branched or linear polymer; (strept)avidin or a nucleic
XX acid. Parallel analysis uses components labeled with ribo-, deoxyribo- or
XX didoxyribo-nucleoside triphosphates, in which the label is cleavable.
XX Particularly analysis involves cyclic sequencing and a preferred method
XX comprises: binding nucleic acid to the solid support, with formation of a
XX extensible primer-matrix complex; performing cyclic reactions and
XX reconstructing the nucleic acid sequence. The sequences being analyzed
XX contain 30-3000 nt, RNA or DNA, and the solid phase may carry nucleic
XX acid sequences that function as primers for the sequencing reaction;
XX alternatively the nucleic acid is fixed to the support and then
XX hybridized with a primer. The incorporated nucleotide includes a
XX reversible terminating group so that only one nucleotide can be
XX incorporated in each step. The surface is specifically used for multiple
XX parallel sequencing of nucleic acids. The surface shows reduced non-
XX specific binding of labeled and unlabeled nucleotides or nucleic acids,
XX so assay sensitivity is improved. This sequence represents an
XX oligonucleotide used to illustrate the method of the invention.
XX
XX Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
```

```
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2734
|
1 AAAAAAAAAAAAAAAAAAAAAAAAAA 26

Db

RESULT 195
```

```

AEF94771
ID AEF94771 standard; DNA; 26 BP.
XX
AC AEF94771;
XX
DT 20-APR-2006 (first entry)
XX
DE Optical DNA analysis process-related oligonucleotide dA26-Cy3 #1.
XX
KW ss; dna detection; DNA sequencing; DNA amplification; oligo dA26-Cy3.
XX
OS Unidentified.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= 5'-Cy3
XX
PN DE102004025695-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025695.
XX
XX 26-MAY-2004; 2004DE-10025695.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVXX GNBH.
XX
XX Cherkasov D, Hennig C;
XX WPI; 2006-185819/20.
XX
XX Optical fluorescent parallel process to analyse nucleic acid chains in
XX which a sample solid is bound with a primer-matrix complex.
XX
XX Example 5; Page 66; 94pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. Further claimed is
XX that the process is able to determine many sequences in parallel. The
XX present sequence is that of oligonucleotide dA26-Cy3 which was used in
XX the development of the novel process of the invention.
XX
XX Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 196
AEF94785
ID AEF94785 standard; DNA; 26 BP.
XX
AC AEF94785;
XX
XX 20-APR-2006 (first entry)
XX
XX

```

```

DE Optical DNA analysis process-related oligonucleotide dA26-Cy3 #2.
XX
KW ss; dna detection; DNA sequencing; DNA amplification; oligo dA26-Cy3.
XX
OS Unidentified.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= b
FT /*mod_base= 5'-Cy3
XX
PN DE102004025695-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025695.
XX
XX 26-MAY-2004; 2004DE-10025695.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVXX GNBH.
XX
XX Cherkasov D, Hennig C;
XX WPI; 2006-185819/20.
XX
XX Optical fluorescent parallel process to analyse nucleic acid chains in
XX which a sample solid is bound with a primer-matrix complex.
XX
XX Example 2; Page 67; 94pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The solid
XX phase is then washed and the sequence repeated as necessary. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. Further claimed is
XX that the process is able to determine many sequences in parallel. The
XX present sequence is that of oligonucleotide dA26-Cy3 which was used in
XX the development of the novel process of the invention.
XX
XX Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 197
AEF94769
ID AEF94769 standard; DNA; 26 BP.
XX
AC AEF94769;
XX
XX 20-APR-2006 (first entry)
XX
XX

```

```

DE Optical DNA analysis process-related oligonucleotide dA26-Cy3 #2.
XX
KW ss; dna detection; DNA sequencing; DNA amplification; oligo dA26-Cy3.
XX
OS Unidentified.
OS Synthetic.
XX

```

```

FH Key modified_base 1 Location/Qualifiers
FT /tag= b
FT /mod_base= 5'-Cy3
XX
XX DE102004025694-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025694.
XX
XX 26-MAY-2004; 2004DE-10025694.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVOXX GMBH.
XX
XX Cherkasov D, Hennig C;
XX
XX WPI; 2006-185818/20.
XX
XX Optical fluorescent ultra-high parallel process to analyse nucleic acid
XX chains in which a sample solid is bound with a primer-matrix complex.
XX
XX Example 2; Page 68; 95pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. The present
XX sequence is that of oligonucleotide dA26-Cy3 which was used in the
XX development of the novel process of the invention.
XX
XX Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26
RESULT 198
AEF94755
ID AEF94755 standard; DNA; 26 BP.
XX
XX AEF94755;
XX
XX 20-APR-2006 (first entry)
XX
XX Optical DNA analysis process-related oligonucleotide dA26-Cy3 #1.
XX
XX ss; dna detection; DNA sequencing; DNA amplification; oligo dA26-Cy3.
XX
XX Unidentified.
XX
XX Synthetic.
XX
XX Key modified_base 1 Location/Qualifiers
FT /tag= a
FT /mod_base= 5'-Cy3
XX
XX DE102004025694-A1.
XX
XX 23-FEB-2006.

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XX 26-MAY-2004; 2004DE-10025694.
XX
XX 26-MAY-2004; 2004DE-10025694.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVOXX GMBH.
XX
XX Cherkasov D, Hennig C;
XX
XX WPI; 2006-185818/20.
XX
XX Optical fluorescent ultra-high parallel process to analyse nucleic acid
XX chains in which a sample solid is bound with a primer-matrix complex.
XX
XX Example 5; Page 67; 95pp; German.
XX
XX This invention relates to a novel optical fluorescent process to analyse
XX nucleic acid chains. Using the method, a sample solid is bound with a
XX primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX are incorporated in the primer matrix by enzyme reaction, followed by
XX washing of the solid phase. The marked nucleotides are detected and their
XX co-ordinates logged and the signals removed. The marked nucleotides are
XX detected and their co-ordinates logged and the signals removed. The Nucleic
XX acid chain sequence is then reconstructed using the signals. The process
XX is faster, more efficient and cheaper than prior art. The present
XX sequence is that of oligonucleotide dA26-Cy3 which was used in the
XX development of the novel process of the invention.
XX
XX Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26
RESULT 199
AEF94730
ID AEF94730 standard; DNA; 26 BP.
XX
XX AEF94730;
XX
XX 20-APR-2006 (first entry)
XX
XX Optical DNA analysis process-related oligonucleotide dA26-Cy3 #2.
XX
XX ss; dna detection; DNA sequencing; DNA amplification; oligo dA26-Cy3.
XX
XX Unidentified.
XX
XX Synthetic.
XX
XX Key modified_base 1 Location/Qualifiers
FT /tag= b
FT /mod_base= 5'-Cy3
XX
XX DE102004025696-A1.
XX
XX 23-FEB-2006.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX 26-MAY-2004; 2004DE-10025696.
XX
XX (CHER/) CHERKASOV D.
XX (HENN/) HENNIG C.
XX (GENO-) GENOVOXX GMBH.

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XX PI Cherkasov D, Hennig C, Baeuml E;
XX WPI; 2006-185820/20.
XX DR
XX PT Ultra-high parallel analysis process to analyse nucleic acid chains in
XX PT which a sample solid is bound and substrate material.
XX PS
XX PS Example 2; Page 95; 141pp; German.
XX CC This invention relates to a novel optical fluorescent process to analyse
XX CC nucleic acid chains. Using the method, a sample solid is bound with a
XX CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX CC are incorporated in the primer matrix by enzyme reaction, followed by
XX CC washing of the solid phase. The marked nucleotides are detected and their
XX CC co-ordinates logged and the signals removed. The marked nucleotides are
XX CC detected and their co-ordinates logged and the signals removed. The solid
XX CC phase is then washed and the sequence repeated as necessary. The Nucleic
XX CC acid chain sequence is then reconstructed using the signals. The process
XX CC is faster, more efficient and cheaper than prior art. Further claimed is
XX CC that the process is able to determine many sequences in parallel. The
XX CC present sequence is that of oligonucleotide dA26-Cy3 which was used in
XX CC the development of the novel process of the invention.
XX SQ Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 200
AEF94716
ID AEF94716 standard; DNA; 26 BP.
XX AC AEF94716;
XX DT 20-APR-2006 (first entry)
XX DE
XX DE Optical DNA analysis process-related oligonucleotide dA26-Cy3 #1.
XX KW ss; dna detection; DNA sequencing; DNA amplification; oligo dA26-Cy3.
XX OS Unidentified.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= 5'-Cy3
FT
XX PN DE102004025696-A1.
XX PD
XX PD 23-FEB-2006.
XX PF 26-MAY-2004; 2004DE-10025696.
XX PR 26-MAY-2004; 2004DE-10025696.
XX PA (CHER/) CHERKASOV D.
XX PA (HENN/) HENNIG C.
XX PA (GENO-) GENOVOXX GMBH.
XX PI Cherkasov D, Hennig C, Baeuml E;
XX DR WPI; 2006-185820/20.
XX PT Ultra-high parallel analysis process to analyse nucleic acid chains in
XX PT which a sample solid is bound and substrate material.

```

```

XX PS Example 5; Page 95; 141pp; German.
XX CC This invention relates to a novel optical fluorescent process to analyse
XX CC nucleic acid chains. Using the method, a sample solid is bound with a
XX CC primer-matrix complex resulting in a cyclic reaction. Marked nucleotides
XX CC are incorporated in the primer matrix by enzyme reaction, followed by
XX CC washing of the solid phase. The marked nucleotides are detected and their
XX CC co-ordinates logged and the signals removed. The marked nucleotides are
XX CC detected and their co-ordinates logged and the signals removed. The solid
XX CC phase is then washed and the sequence repeated as necessary. The Nucleic
XX CC acid chain sequence is then reconstructed using the signals. The process
XX CC is faster, more efficient and cheaper than prior art. Further claimed is
XX CC that the process is able to determine many sequences in parallel. The
XX CC present sequence is that of oligonucleotide dA26-Cy3 which was used in
XX CC the development of the novel process of the invention.
XX SQ Sequence 26 BP; 26 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.2e+02;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

RESULT 201
AAV71935/C
ID AAV71935 standard; DNA; 27 BP.
XX AC AAV71935;
XX DT 18-FEB-1999 (first entry)
XX DE
XX DE Anchored poly T RT-PCR primer.
XX KW Normalised; cDNA library; mRNA cloning; reverse transcription;
XX KW immobilise; screening; hybridisation; nucleic acid amplification;
XX KW expression pattern; drug development; PCR primer; RT-PCR; ss.
XX OS Synthetic.
XX PN WO9851789-A2.
XX PD 19-NOV-1998.
XX PF 13-MAY-1998; 98WO-DK000186.
XX PR 13-MAY-1997; 97DK-00000547.
XX PR 19-MAY-1997; 97US-00871030.
XX PR 27-MAR-1998; 98DK-00000432.
XX PA (DISP-) DISPLAY SYSTEMS BIOTECH APS.
XX PI Warthoe PR;
XX WPI; 1999-009772/01.
XX DR
XX PT Preparation of normalised, subdivided cDNA libraries from mRNA - by
XX PT reverse transcription and amplification, used to screen for new genes and
XX PT interacting proteins, potential drugs, and for diagnosis.
XX PS
XX PS Example 1; Page 29; 71pp; English.
XX CC The invention relates to preparation of a normalised, subdivided library
XX CC of amplified cDNA from the coding regions of mRNA in a sample. The method
XX CC involves reverse transcription, with at least one cDNA primer of formula
XX CC 5'-Con1-dTn2-Vn3-Nn4 to form first stand cDNA where Con1 = any sequence
XX CC of 1-100 nucleotides; dT = deoxythymidyl; n2 is at least 1; n3 and n4
XX CC are both 0, or n3 is 1 and n4 is at least 1; followed by second strand
XX CC cDNA synthesis using the first strand as template and a second cDNA

```

CC primer of a similar formula, in the presence of DNA polymerase I (or its
 CC Klenow fragment) and amplification of double-stranded cDNA with a set of
 CC amplification primers. Comparison of cDNA in the prepared library with a
 CC database (a computer-generated list of molecular weights of restricted
 CC DNA fragments of known sequence) is used to determine presence of an
 CC expressed protein in a cell, also to detect changes in such expression
 CC (particularly for diagnosis of disease). Surfaces (chip) having amplified
 CC cDNA stably immobilised on it, obtained by a similar method, are used to
 CC screen for genes of a particular family, by hybridisation with nucleic
 CC acid from the family (to identify new genes) and to detect differences in
 CC expression patterns between cells. The polypeptides expressed by the
 CC libraries can be used for drug development. Sequences AAV71935 to
 CC AAV71946 represent primers used to exemplify the method of the invention
 XX
 SQ Sequence 27 BP; 2 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 26; DB 1; Length 27;
 Best Local Similarity 100.0%; Pred. No. 3.3e+02;
 Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 Db 26 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 202

AAV59216/c

ID AAV59216 standard; DNA; 29 BP.

AC AAV59216;

XX 14-DEC-1998 (first entry)

XX Linear multimer produced by rolling circle synthesis.

XX ss; RNA oligonucleotide; probe; standard; diagnostic; therapeutic agent.

XX Synthetic.

XX WO9838300-A1.

XX 03-SEP-1998.

XX 26-FEB-1998; 98WO-US003784.

XX 26-FEB-1997; 97US-00805631.

XX (UYRP) UNIV ROCHESTER.

XX Kool ET;

XX WPI; 1998-481202/41.

XX Synthesis of oligonucleotide(s) - using a single-stranded circular
 PT oligonucleotide template ribonucleotide triphosphate(s) and a
 PT polymerase to form multimer(s) which can be cleaved.

XX Example 2; Page 36; 100pp; English.

XX The linear multimer was produced by rolling circle synthesis in an
 CC example of the method of the invention for synthesising an RNA
 CC oligonucleotide, comprising combining a single-stranded circular
 CC oligonucleotide template comprising at least one copy of a nucleotide
 CC sequence complementary to the sequence of the desired RNA oligonucleotide
 CC with at least 2 types of ribonucleotide triphosphate and a polymerase
 CC enzyme to yield a single-stranded RNA oligonucleotide multimer
 CC complementary to the circular oligonucleotide template, where the RNA
 CC oligonucleotide multimer comprises multiple copies of the desired RNA
 CC oligonucleotide. The methods can be used for producing RNA
 CC oligonucleotides having a specific sequence and well defined ends. The
 CC RNA oligonucleotides produced can be used as probes, standards and
 CC diagnostic or therapeutic agents. They can be used for modifying the
 CC structure or function of a target molecule. They can also be used to

CC cleave disease-associated RNA, DNA or protein
 XX
 SQ Sequence 29 BP; 0 A; 0 C; 2 G; 27 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.8; DB 1; Length 29;
 Best Local Similarity 93.1%; Pred. No. 3.5e+02;
 Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
 Db 29 AAAAAAAAAAACCAAAAAAAAAAAAAAAAAA 1

RESULT 203

ADC65873/c

ID ADC65873 standard; DNA; 29 BP.

XX AC ADC65873;

XX 18-DEC-2003 (first entry)

XX DNA oligonucleotide #6.

XX RNA oligonucleotide synthesis; ribonucleotide triphosphate; polymerase;
 KW electroporation; calcium phosphate treatment; lipid-mediated delivery;
 KW cation-mediated delivery; bacterial infection; viral infection;
 KW drug resistant infection; double stranded DNA oligomer; ss.

XX Synthetic.

XX US2003087241-A1.

XX 08-MAY-2003.

XX 30-NOV-2001; 2001US-00997931.

XX 15-APR-1993; 93US-00047860.

XX 23-FEB-1995; 95US-00393439.

XX 26-FEB-1997; 97US-00805631.

XX 11-MAY-2000; 2000US-00569344.

XX (UYRP) UNIV ROCHESTER.

XX Kool ET;

XX WPI; 2003-755141/71.

XX Synthesizing RNA oligonucleotide involves combining single-stranded
 PT circular oligonucleotide, ribonucleotide triphosphate and polymerase
 PT enzyme to yield desired RNA complementary to circular oligonucleotide
 PT template.

XX Example 2; SEQ ID NO 6; 78pp; English.

XX The invention relates to a method for synthesising an RNA
 CC oligonucleotide, comprising combining a single-stranded circular
 CC oligonucleotide template with at least two types of ribonucleotide
 CC triphosphate and a polymerase enzyme to yield a single-stranded RNA
 CC oligonucleotide multimer complementary to the circular oligonucleotide
 CC template, where the RNA oligonucleotide multimer comprises multiple
 CC copies of the desired RNA oligonucleotide. The method is useful for
 CC synthesising an RNA oligonucleotide with well-defined ends. The circular
 CC oligonucleotide is introduced into the cell using direct injection,
 CC electroporation, calcium phosphate treatment, lipid-mediated delivery, or
 CC cation-mediated delivery. The method is useful for treating bacterial
 CC and/or viral infections in mammals, particularly drug resistant
 CC infections, and for producing double stranded DNA oligomers. The method
 CC is performed in the absence of an oligonucleotide primer, or without the
 CC addition of auxiliary proteins. This sequence represents an
 CC oligonucleotide used in the method of the invention.

XX Sequence 29 BP; 0 A; 0 C; 2 G; 27 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.8; DB 1; Length 29;
 Best Local Similarity 93.1%; Pred. No. 3.5e+02;
 Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
 |||||
 DB 29 AAAAAAAAAACAAAAAAAAAAAAAAAAACAA 1

RESULT 204
 ADO81065/c
 ID ADO81065 standard; DNA; 29 BP.

AC ADO81065;
 XX
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE Cow prion protein microsatellite locus primer #77.
 XX
 KW gene typing; polymorphic microsatellite loci; PML;
 KW disease predisposition; microsatellite marker; prion disease;
 KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
 KW milk protein; hormone; transcription factor; pT7-blue-vector; cow;
 KW microsatellite; PCR; primer; ss.
 XX
 OS Bos taurus.

XX
 PN DE10236711-A1.
 XX
 PD 26-FEB-2004.
 XX

PF 09-AUG-2002; 2002DE-01036711.
 XX
 PR 09-AUG-2002; 2002DE-01036711.
 XX

XX (UYHO-) UNIV HOHENHEIM.
 XX Geldermann H, Preuss S, Han Y;
 PI WPI; 2004-215730/21.
 DR
 XX

XX Typing genes that contain polymorphic microsatellite loci, useful for
 PT identifying predisposition to disease, by amplification and determining
 PT length of amplicons.

XX Example 3; Page 28; 64pp; German.

XX The invention describes a method of typing (M1) a gene (I) that has one
 CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
 CC amplification of at least one DNA region of (I) that includes PML, using
 CC as template a DNA sample containing at least one segment of (I); and
 CC determining the length of the resulting amplicon(s). Also described are:
 CC a method of determining (M2) microsatellite markers (MM) for
 CC predisposition to a disease, associated with a gene that includes one or
 CC more PML; and prediagnosis (M3) of diseases associated with gene that
 CC include PML. The method is used to identify microsatellite markers, in a
 CC disease-related gene, that are associated with a predisposition to
 CC diseases and for prediagnosis of such diseases, especially prion diseases
 CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
 CC metabolic diseases; also to type genes that encode milk proteins,
 CC hormones or transcription factors. The method is simpler, quicker and
 CC particularly less expensive than known methods based on sequencing. This
 CC sequence represents a primer used to genotype a region of the cow prion
 CC protein (PrP) comprising a polymorphic microsatellite locus.

XX Sequence 29 BP; 0 A; 2 C; 0 G; 27 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.8; DB 1; Length 29;
 Best Local Similarity 93.1%; Pred. No. 3.5e+02;
 Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
 |||||

DB 29 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 205
 ADO81069/c
 ID ADO81069 standard; DNA; 29 BP.
 XX
 AC ADO81069;

XX
 DT 29-JUL-2004 (first entry)

XX Cow prion protein microsatellite locus primer #81.

XX
 KW gene typing; polymorphic microsatellite loci; PML;
 KW disease predisposition; microsatellite marker; prion disease;
 KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
 KW milk protein; hormone; transcription factor; pT7-blue-vector; cow;
 KW microsatellite; PCR; primer; ss.

XX Bos taurus.

XX DE10236711-A1.

XX 26-FEB-2004.

XX 09-AUG-2002; 2002DE-01036711.

XX 09-AUG-2002; 2002DE-01036711.

XX (UYHO-) UNIV HOHENHEIM.

XX Geldermann H, Preuss S, Han Y;

XX WPI; 2004-215730/21.

XX Typing genes that contain polymorphic microsatellite loci, useful for
 PT identifying predisposition to disease, by amplification and determining
 PT length of amplicons.

XX Example 3; Page 28; 64pp; German.

XX The invention describes a method of typing (M1) a gene (I) that has one
 CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
 CC amplification of at least one DNA region of (I) that includes PML, using
 CC as template a DNA sample containing at least one segment of (I); and
 CC determining the length of the resulting amplicon(s). Also described are:
 CC a method of determining (M2) microsatellite markers (MM) for
 CC predisposition to a disease, associated with a gene that includes one or
 CC more PML; and prediagnosis (M3) of diseases associated with gene that
 CC include PML. The method is used to identify microsatellite markers, in a
 CC disease-related gene, that are associated with a predisposition to
 CC diseases and for prediagnosis of such diseases, especially prion diseases
 CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
 CC metabolic diseases; also to type genes that encode milk proteins,
 CC hormones or transcription factors. The method is simpler, quicker and
 CC particularly less expensive than known methods based on sequencing. This
 CC sequence represents a primer used to genotype a region of the cow prion
 CC protein (PrP) comprising a polymorphic microsatellite locus.

XX Sequence 29 BP; 0 A; 2 C; 0 G; 27 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.8; DB 1; Length 29;
 Best Local Similarity 93.1%; Pred. No. 3.5e+02;
 Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
 |||||
 DB 29 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 206
 AAQ83940
 ID AAQ83940 standard; DNA; 30 BP.

```
XX AC AAQ83940;
XX DT 25-MAR-2003 (revised)
XX DT 04-OCT-1995 (first entry)
XX DE Oligonucleotide clamp o, for producing comb-type brached polymer.
XX KW HIV; pol; nef; oligonucleotide clamp; branched; macromolecule; ss.
XX OS Synthetic.
XX PH Key Location/Qualifiers
XX FT modified_base 1 /*tag= a
XX FT /*note= "Modified with SP(O-)(=O)-"
XX PN WO9501365-A1.
XX PD 12-JAN-1995.
XX PF 05-JUL-1994; 94WO-US007557.
XX PR 02-JUL-1993; 93US-00087386.
XX PA (LYNX-) LYNX THERAPEUTICS INC.
XX PI Gryaznov SM;
XX DR WPI; 1995-060944/08.
XX XX Synthesis of branched polymers and novel branched polymeric structures -
XX PT used as molecular probes esp. for detecting poly-nucleotide(s).
XX PS Example 8; Page 33; 52pp; English.
XX CC The sequences given in AAQ83938, AAQ83952 and AAQ83940 are used in the
XX CC construction of an oligonucleotide clamp. The clamp is a comb-type
XX CC branched polymer which has 3' termini and was used to bind a target
XX CC sequence comprising a segment of the HIV pol and nef genes in single
XX CC stranded or double stranded forms. An oligonucleotide clamp is a compound
XX CC capable of forming a covalently closed macromolecule or a stable circular
XX CC complex after specifically binding to the target polynucleotide.
XX CC Oligonucleotide clamps generally comprise one or more oligonucleotide
XX CC moieties capable of specific binding to the target molecule and one or
XX CC more pairs of binding moieties covalently linked to the oligonucleotide
XX CC moieties. Upon annealing of the oligonucleotides moieties to the target
XX CC polynucleotide, the binding moieties of a pair are bought into
XX CC juxtaposition so that they form a stable covalent or non-covalent linkage
XX CC or complex. The interaction of the binding moieties effectively clamps
XX CC the specifically annealed oligonucleotide moieties to the target
XX CC polynucleotide. (Updated on 25-MAR-2003 to correct PN field.)
XX SQ Sequence 30 BP; 27 A; 3 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.8; DB 1; Length 30;
Best Local Similarity 93.1%; Pred. No. 3.6e+02;
Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2706 ACTATAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
DB 2 ACACAAAAAAAAAAAAAAAAAAAAAAAAA 30

RESULT 207
ADA26181/c
ID ADA26181 standard; DNA; 30 BP.
XX AC ADA26181;
XX DT 20-NOV-2003 (first entry)
XX DE Rice semi-dwarf (sd-1) DNA fragment SEQ ID NO:26.
XX KW genotype; plant; rice; semi-dwarf; sd-1; polymorphism; detection;
XX KW characteristic; single nucleotide polymorphism; SNP; genotyping;
XX OS chromosome 1; gene; ds.
XX OS Synthetic.
XX OS Oryza sativa.
XX PN WO2003070934-A1.
XX PD 28-AUG-2003.
XX PF 07-FEB-2003; 2003WO-JP001317.
XX PR 25-FEB-2002; 2002JP-00048115.
XX PA (PLAN-) PLANT GENOME CENT CO LTD.
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XX KW Oligonucleotide clamp; ds.
XX OS Unidentified.
XX PN US6180777-B1.
XX PD 30-JAN-2001.
XX PF 03-JAN-1997; 97US-00787321.
XX PR 12-JAN-1996; 96US-0009918P.
XX PA (FARB ) BAYER CORP.
XX PI Horn T;
XX DR WPI; 2001-201911/20.
XX CC Synthesizing branched nucleic acids useful as diagnostic and molecular
XX CC probes, involves combining first units having haloalkylamino groups and
XX CC second units having thiol or phosphorothioate groups.
XX PS Example 8; Col 19; 20pp; English.
XX CC The present invention relates to a method for synthesising a branched or
XX CC multiply connected macromolecular structure, comprising oligonucleotide
XX CC clamps (OC). The macromolecular structure is capable of specifically
XX CC binding to a target molecule, and can therefore be used as probes. At
XX CC least one OC comprises a target binding sequence that binds specifically
XX CC and stably with the target molecule, and at least two OCs comprise signal
XX CC generation moieties capable of generating a detectable signal in the
XX CC presence of the target molecule. In addition the OCs are connected to one
XX CC another by thioalkylamino, or thiophosphorylalkylamino bridges. The
XX CC present sequence is an OC used in the present invention
XX SQ Sequence 30 BP; 27 A; 3 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.8; DB 1; Length 30;
Best Local Similarity 93.1%; Pred. No. 3.6e+02;
Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2706 ACTATAAAAAAAAAAAAAAAAAAAAAAAAAA 2734
DB 2 ACACAAAAAAAAAAAAAAAAAAAAAAAAA 30

RESULT 208
ADA26181/c
ID ADA26181 standard; DNA; 30 BP.
XX AC ADA26181;
XX DT 20-NOV-2003 (first entry)
XX DE Rice semi-dwarf (sd-1) DNA fragment SEQ ID NO:26.
XX KW genotype; plant; rice; semi-dwarf; sd-1; polymorphism; detection;
XX KW characteristic; single nucleotide polymorphism; SNP; genotyping;
XX OS chromosome 1; gene; ds.
XX OS Synthetic.
XX OS Oryza sativa.
XX PN WO2003070934-A1.
XX PD 28-AUG-2003.
XX PF 07-FEB-2003; 2003WO-JP001317.
XX PR 25-FEB-2002; 2002JP-00048115.
XX PA (PLAN-) PLANT GENOME CENT CO LTD.
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XX PI Minobe Y, Monna L, Kitazawa N, Yoshino R, Suzuki J;
XX XX
XX DR WPI; 2003-697617/66.
XX XX
XX PT Judging the genotype of a region around a plant sd-1 gene with
XX PT polymorphism-obtained markers isolated by positional cloning, useful in
XX PT genotyping for examination of semi-dwarf character of rice.
XX PS Disclosure; Page 15; 104pp; Japanese.
XX XX
XX CC The present invention describes a method for judging the genotype of a
XX CC region around a plant semi-dwarf (sd-1) gene in which polymorphisms are
XX CC present, by detecting the polymorphisms. Also described: (1) examining
XX CC semi-dwarf characteristics of a plant using the judgment method with
XX CC detection of polymorphisms; (2) oligonucleotides for amplifying sd-1 DNA
XX CC regions, which are primers for judging the genotype of a region around a
XX CC plant sd-1 gene; (3) reagents for judging the genotype of a region around a
XX CC plant sd-1 gene containing these oligonucleotides; and (4) reagents for
XX CC examining the semi-dwarf character of a plant containing the
XX CC oligonucleotides. The method is for judging the genotype of a region
XX CC around a plant sd-1 gene, which is applicable in genotyping by (d)CAPS
XX CC ((derived) cleaved amplified polymorphic sequence) for examination of the
XX CC semi-dwarf character of rice to identify desirable strains e.g. with high
XX CC crop yield, pest resistance and resistance to flooded water. The method
XX CC is easy and quick, in which a seedling is required for studying single
XX CC nucleotide polymorphisms (SNPs) for genotyping, without needing
XX CC cultivation of seedling to fully-grown plant for judging heterozygote and
XX CC distinguishing morphology. The present sequence represents a rice sd-1
XX CC DNA fragment, which is given in the exemplification of the present
XX CC invention. Rice sd-1 is located on chromosome 1.
XX SQ Sequence 30 BP; 0 A; 3 C; 0 G; 27 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.8; DB 1; Length 30;
Best Local Similarity 93.18; Pred. No. 3.6e+02;
Matches 27; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2737
Db 30 AAAAAAAAAAGAGAAAAAAAAAAAAAAAAAAAAA 2

RESULT 209
AAQ87894/c
ID AAQ87894 standard; DNA; 32 BP.
AC AAQ87894;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 29-NOV-1995 (first entry)
XX XX
XX DE Normalised library first strand cDNA synthesis primer.
XX XX
XX KW Normalised cDNA library; directionally cloned cDNA library; screening;
XX KW hybridisation; ss.
XX OS Synthetic.
XX XX
XX PH Key Location/Qualifiers
XX FT misc_feature 15..18
XX FT /*tag= a
XX FT /note= "characteristic sequence identifier"
XX XX
XX PN WO9508647-A1.
XX XX
XX PD 30-MAR-1995.
XX XX
XX PF 23-SEP-1994; 94WO-US010821.
XX XX
XX PR 24-SEP-1993; 93US-00126594.
XX XX
XX PA (UYCO ) UNIV COLUMBIA NEW YORK.

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XX XX
XX PI Soares MB, Efstratiadis A;
XX XX
XX DR WPI; 1995-139615/18.
XX XX
XX PT New normalised directional cDNA libraries - used for isolating novel
XX PT cDNA's, including tissue-specific and development-specific DNA.
XX PS Disclosure; Page 45; 186pp; English.
XX XX
XX CC Human tissues were obtained for construction of a variety of cDNA
XX CC libraries, including infant brain, adult brain and adult hippocampus.
XX CC Each of the cDNA libraries had a characteristic sequence identifier,
XX CC provided by the oligonucleotide utilised to prime first strand cDNA
XX CC synthesis (see AAQ87894-Q87907 for these primer sequences; all these
XX CC primers have the PacI restriction site for directional cloning of cDNAs).
XX CC Each of the libraries was propagated in the form of single-stranded (ss)
XX CC circles and normalised separately by a novel method. The method
XX CC comprises: generating fragments complementary to the 3' non-coding
XX CC sequence of the ss circles in the library to produce partial duplexes;
XX CC purifying the partial duplexes; melting and reassociating them to
XX CC appropriate Cot; and purifying the unassociated ss circles to generate a
XX CC normalised cDNA library. (Updated on 25-MAR-2003 to correct PN field.)
XX SQ Sequence 32 BP; 4 A; 0 C; 0 G; 28 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.6; DB 1; Length 32;
Best Local Similarity 87.5%; Pred. No. 3.8e+02;
Matches 28; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2740
Db 32 AAAAAAAAAAAAAAAAAATTAATTAATAAAAAA 1

RESULT 210
ABX79828/c
ID ABX79828 standard; cDNA; 27 BP.
XX XX
XX AC ABX79828;
XX XX
XX DT 17-APR-2003 (first entry)
XX XX
XX DE EST polymorphic DNA repeat polynucleotide #153.
XX XX
XX KW EST; expressed sequence tag; ss; polymorphic repeat; tandem repeat;
XX KW polymorphic marker prediction of ubiquitous simple sequences; POMPOUS;
XX KW Rep-X; human; genetic disease; drug-treatment; Machado-Joseph;
XX KW Haw River syndrome; Huntington's disease; fragile-X syndrome;
XX KW Fredreich's ataxia; myotonic dystrophy; hyperandrogenaemia;
XX KW spinal atrophy; bulbar atrophy; spinocerebellar ataxia.
XX XX
XX OS Homo sapiens.
XX XX
XX PN US6472154-B1.
XX XX
XX PD 29-OCT-2002.
XX XX
XX PF 31-DEC-1999; 99US-00475947.
XX XX
XX PR 31-DEC-1999; 99US-00475947.
XX XX
XX PA (TEXA ) UNIV TEXAS SYSTEM.
XX XX
XX PI Garner HR, Wren JD, Minna JD, Fondon JW;
XX XX
XX DR WPI; 2003-208818/20.
XX XX
XX PT Identifying a candidate polymorphic repeat within a coding sequence, for
XX PT understanding or treating genetic disease, comprises detecting tandem
XX PT repeats in a target coding sequence and scoring the repeats for
XX PT polymorphic probability.
XX XX

```

PS Example; Col 717; 589pp; English.

XX The invention discloses a method for identifying a candidate polymorphic repeat within a coding sequence (expressed sequence tag, EST), which comprises detecting tandem repeats in a target coding sequence, scoring the repeats for polymorphic probability and generating a dataset correlating the repeats with polymorphic probability to identify a candidate polymorphic repeat. The computational methods (polymorphic marker prediction of ubiquitous simple sequences, PomPous, and Rep-X) are useful for identifying and detecting candidate polymorphic repeats in human genes, which can be used to understand, treat or eliminate genetic diseases, predispositions or adverse drug-treatment reactions. Examples of diseases linked to nucleotide repeats are Machado-Joseph, Haw River syndrome, Huntington's disease, fragile-X syndrome, Friedreich's ataxia, myotonic dystrophy, hyperandrogenaemia, spinal and bulbar atrophy and CC spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are CC the polymorphic repeats identified for a search of human ESTs

XX Sequence 27 BP; 1 A; 0 C; 0 G; 26 T; 0 U; 0 Other;

Query Match 0.9%; Score 25.4; DB 1; Length 27;
Best Local Similarity 96.3%; Pred. No. 3.6e+02;
Matches 26; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
DB 27 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 211
ADG83852/c

ID ADG83852 standard; DNA; 27 BP.

AC ADG83852;

XX 11-MAR-2004 (first entry)

XX Primer for cDNA synthesis.

XX Snake venom; protease; prothrombin activator; haemostatic; vulnery;

KW fibrin glue; primer; ss.

XX Synthetic.

XX WO2003082914-A1.

XX 09-OCT-2003.

XX 03-APR-2003; 2003WO-AU000406.

XX 03-APR-2002; 2002AU-00001483.

PR 07-MAR-2003; 2003AU-00901033.

XX (UYQU) UNIV QUEENSLAND.

XX Masci PP, De Jersey J, Lavin M;

XX WPI; 2004-081833/08.

XX New snake venom protease preparation useful in promoting hemostasis and PT preventing blood loss such as during surgery, in treating wounds PT resulting from accidents and other types of injury or trauma, or as a PT surgical sealant or adhesive.

XX Example; SEQ ID NO 32; 173pp; English.

XX The present sequence is that of a primer used for cDNA synthesis from CC snake venom gland RNA. Polynucleotides encoding snake venom protease CC (SVP) were isolated from brown snake ADG83825, coastal taipan ADG83827, CC inland taipan ADG83829, red belly ADG83831, tiger ADG83833 and rough CC scale ADG83835 snake venom gland cDNA libraries. The invention is based CC on the discovery of the cofactor-independent prothrombin activating CC activity of these SVPs. The SVPs can be used e.g. to promote haemostasis

CC and prevent blood loss such as during surgery or for treatment of wounds CC resulting from injury or trauma, and may be useful as a topical fibrin CC 'glue' or 'sealant'.

XX Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 2 Other;

Query Match 0.9%; Score 25.4; DB 1; Length 27;
Best Local Similarity 92.6%; Pred. No. 3.6e+02;
Matches 25; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
DB 27 BBAATAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 212
AAS20595/c

ID AAS20595 standard; DNA; 26 BP.

XX AAS20595;

XX 23-APR-2002 (first entry)

XX Human zsig63 cDNA sequencing primer ZC7231.

XX Human; zsig63; chromosome 4q12-4q13; salivary protein; antimicrobial; ss;
KW microbial infection; tooth decay; periodontal disease; thrush; emphysema;
KW gastrointestinal disease; urinary tract infection; vaginal infection;
KW skin infection; epithelial wound; chronic tissue damage; cystic fibrosis;
KW acquired immunodeficiency syndrome; AIDS; lung infection; sarcoidosis;
KW chronic bronchitis; gene therapy; protein therapy; primer; ZC7231.

XX Homo sapiens.

XX US6331413-B1.

XX 18-DEC-2001.

XX 17-MAR-2000; 2000US-00527345.

XX 17-MAR-1999; 99US-0124820P.

XX (ZYMO) ZYMOGENETICS INC.

XX Adler DA, Sheppard PO;

XX WPI; 2002-096707/13.

XX Polynucleotides encoding salivary proteins useful as anti-microbial agents.

XX Example 1; Col 53; 29pp; English.

XX The invention relates to a polynucleotide derived from the 4q12-4q13 CC region of human chromosome 4 and encoding a zsig63 polypeptide, a CC secreted salivary protein with anti-microbial activity. Due to their CC microbial activity, the sequences can be used in the study of microbial CC infections, e.g. for recombinant production of anti-microbial proteins. CC The sequences can be used in the treatment of tooth decay, periodontal CC disease, thrush, gastrointestinal disease, urinary tract infections, CC vaginal infections, skin infections, epithelial wounds, chronic tissue CC damage, acquired immunodeficiency syndrome (AIDS), cystic fibrosis, lung CC infections, sarcoidosis, emphysema and chronic bronchitis. This sequence CC represents a sequencing primer for cDNA encoding human zsig63

XX Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;

Query Match 0.9%; Score 25.2; DB 1; Length 26;
Best Local Similarity 96.2%; Pred. No. 3.6e+02;
Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAATAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
DB 27 TAAATAAAAAAAAAAAAAAAAAAAAAAAAAA 1

Db 26 BAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 213

ABS52637/c

XX ABS52637 standard; DNA; 26 BP.

AC ABS52637;

XX 15-NOV-2002 (first entry)

DT

XX Human secreted salivary protein zsig63 PCR primer ZC7321.

DE

XX Human; secreted salivary protein; zsig63; immunogen; zsig63-cytokine; antibody-cytokine; in vivo killing; pathological microbe; bacteria; fungal; viral; infection; salivary gland; anti-microbial; dental caries; tooth decay; periodontal disease; thrush; gastrointestinal disease; urinary tract infection; vaginal infection; skin infection; microflora; epithelial wound; pathogenic colonisation; invasion; pro-inflammatory; chronic tissue damage; vascular system; diabetes; anti-inflammatory; incompetent immune system; AIDS; acquired immunodeficiency syndrome; chemotherapy; radiation treatment; lung infection; cystic fibrosis; digestion; PCR; primer; ss.

XX Homo sapiens.

OS

XX US2002081701-A1.

PN

XX 27-JUN-2002.

PD

XX 03-AUG-2001; 2001US-00922480.

PF

XX 17-MAR-1999; 99US-0124820P.

XX

PR 17-MAR-2000; 2000US-00527345.

PR

XX (ADLER/) ADLER D A.

PA

PA (SHEP/) SHEPPARD P O.

PA

PI Adler DA, Sheppard PO;

XX

XX WPI; 2002-635468/68.

DR

XX Novel secreted salivary protein. zsig63 and polynucleotide encoding it useful for treating microbial infections, inflammatory conditions, dental caries and lung infections associated with cystic fibrosis.

PT

PT Example 1; Page 29; 33pp; English.

PS

XX The present invention relates to a new secreted salivary protein, zsig63. The invention is useful for detecting in a test sample, the presence of an antagonist or agonist of zsig63 protein activity. The invention is also useful as an immunogen for producing an antibody to zsig63 polypeptide. zsig63-cytokine fusion proteins or antibody-cytokine fusion protein are useful for enhancing in vivo killing of target tissues. CC Pharmaceutical composition comprising purified zsig63 polypeptide are useful in the treatment of conditions associated with pathological microbes, including bacterial, fungal and viral infections. High CC expression of zsig63 in salivary gland suggests that anti-microbial CC polypeptides are useful for treatment of dental caries (tooth decay), CC periodontal disease, thrush and gastrointestinal disease. Other CC applications can be used in urinary tract infections, vaginal infections, CC prevention of infection in skin and other epithelial wounds. The CC polypeptides can be used to establish normal microflora and protect CC against pathogenic colonisation and invasion. The invention is useful CC when pro-inflammatory activity is desired. Applications for such pro-inflammatory activity include the treatment of chronic tissue damage, CC particularly in areas having a limited or damaged vascular system e.g., CC damage in extremities associated with diabetes. Antagonists to zsig63 CC polypeptides may be useful as anti-inflammatory agents. The invention is CC useful for the treatment of patients having incompetent immune system, CC such as AIDS (acquired immunodeficiency syndrome) patients or individuals CC that have undergone chemotherapy, radiation treatment. The invention is CC also useful for the treatment of lung infections associated with cystic

CC fibrosis and its agonists or antagonists are useful for aiding digestion. CC The present nucleic acid sequence represents a PCR primer that was used CC in the methods of the invention for identification of zsig63

XX

XX Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;

XX

Query Match 0.9%; Score 25.2; DB 1; Length 26;

Best Local Similarity 96.2%; Pred. No. 3.6e+02;

Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAA 2733

Db :|||||||

26 BAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 214

AAD45054/c

ID AAD45054 standard; DNA; 26 BP.

XX

AC AAD45054;

XX

XX 27-DEC-2002 (first entry)

DT

XX

XX ZC7321 primer used in the identification of human zsig63 DNA.

DE

XX Human; secreted salivary protein; zsig63 protein; host defense protein; immune modulating factor; antipathogenic; cell-cell signalling molecule; growth factor; cytokine; growth factor hormone activity; dental caries; infection; tooth decay; periodontal disease; gastrointestinal disease; thrush; urinary tract infection; vaginal infection; diabetes; obesity; anti-inflammatory; chronic tissue damage; lung dysfunction; restenosis; gene therapy; salivary gland dysfunction; prostate gland dysfunction; forensic DNA profiling; chondrosarcoma; atherosclerosis; primer; ss.

XX Homo sapiens.

OS

XX US2002090677-A1.

PN

XX 11-JUL-2002.

PD

XX 03-AUG-2001; 2001US-00923236.

PF

XX 17-MAR-1999; 99US-0124820P.

XX

PR 17-MAR-2000; 2000US-00527345.

PR

XX (ADLER/) ADLER D A.

PA

PA (SHEP/) SHEPPARD P O.

PA

PI Adler DA, Sheppard PO;

XX

XX WPI; 2002-642378/69.

DR

XX Novel secreted salivary polypeptide, zsig63, useful as antimicrobial agent for treating microbial infection, dental caries, periodontal disease, thrush gastrointestinal disease, and for aiding digestion.

PT

PT Example 1; Page 29; 33pp; English.

PS

XX The invention relates to human secreted salivary polypeptide designated as zsig63 and nucleic acid molecules encoding such polypeptides. zsig63 can be used in detecting agonists and antagonists of its activity, and is also useful as a host defense polypeptide, immune modulating factor, antipathogenic polypeptide, cell-cell signalling molecule, growth factor, cytokine, or as secreted extracellular matrix associated proteins with growth factor hormone activity. It is useful for treating conditions associated with pathological microbes, including bacterial, fungal and viral infections, for treating dental caries (tooth decay), periodontal disease, thrush and gastrointestinal disease, for treating urinary tract infection, vaginal infection and for preventing infection in skin and other epithelial wounds. zsig63 is useful for establishing normal microflora and protect against pathogenic colonisation and invasion, for treating chronic tissue damage e.g. damage in extremities associated with diabetes and useful as anti-inflammatory agents. It is useful as a marker

CC of lung dysfunction, salivary gland dysfunction, or dysfunction of
 CC prostate gland. It is also therapeutically useful for aiding digestion.
 CC Polynucleotides of the invention are used in gene therapy for increasing
 CC or inhibiting zsig63 activity, for detecting abnormalities on human
 CC chromosome 4 associated with disease or other human traits and as
 CC diagnostics in forensic DNA profiling. Sequences of the invention are
 CC useful for stimulating proliferation or differentiation of cardiac
 CC myocytes, for proliferation or differentiation of adipocytes and for
 CC inhibiting chondrosarcomas, atherosclerosis, restenosis and obesity. The
 CC present sequence is a primer used in the identification of human zsig63
 CC DNA
 XX
 SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;
 Query Match 0.9%; Score 25.2; DB 1; Length 26;
 Best Local Similarity 96.2%; Pred. No. 3.6e+02;
 Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 Db :|||||
 26 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 215
 ABX93598/C
 ID ABX93598 standard; DNA; 26 BP.
 XX
 AC ABX93598;
 XX
 DT 28-MAY-2003 (first entry)
 XX
 DE Human zsig63 PCR/sequencing primer ZC7231.
 XX
 XX ss; PCR; zsig63; adhesin; salivary gland; dental caries;
 KW periodontal disease; thrush; gastrointestinal disease; epithelial wound;
 KW urinary tract infection; vaginal infection; skin infection; primer;
 KW pro-inflammatory; chronic tissue damage; vascular system; diabetes; AIDS;
 KW lung infection; cystic fibrosis; lung dysfunction; digestive;
 KW salivary gland carcinoma; Pneumocystis carinii infection; emphysema;
 KW chronic bronchitis; prostate dysfunction; prostate adenocarcinoma;
 KW cell culture media; gene therapy; human chromosome 4q12-4q13;
 KW dentinogenesis imperfecta; dentin dysplasia type II.
 XX
 OS Synthetic.
 XX
 XX US2002173027-A1.
 XX
 XX 21-NOV-2002.
 XX
 XX 03-AUG-2001; 2001US-00922469.
 XX
 XX 17-MAR-1999; 99US-0124820P.
 XX 17-MAR-2000; 2000US-00527345.
 XX
 XX (ADLER/) ADLER D A.
 XX (SHEP/) SHEPPARD P O.
 XX
 XX Adler DA, Sheppard PO;
 XX
 XX WPI; 2003-328428/31.
 XX
 XX Novel isolated zsig63 polypeptide, member of the adhesin family, useful
 XX for treating dental caries, periodontal disease, thrush,
 XX gastrointestinal disease, urinary tract infections, vaginal infections,
 XX skin infections.
 XX
 XX Example 1; Page 29; 32pp; English.
 PS
 XX The invention relates to an isolated zsig63 polypeptide comprising at
 CC least 90% identity to an amino acid sequence which comprises domain 1 of
 CC zsig63, domain 2, domain 3, mature zsig63 and full length zsig3. Also
 CC included are the polynucleotide encoding zsig63, a zsig63 expression
 CC vector, a cultured cell comprising the vector and expressing the protein,
 CC

CC a DNA encoding a fusion protein (comprising amino acids 1-15, 16-37, 38-
 CC 126, 127-219 or 16-219 of zsig63 and an additional protein), using a
 CC zsig63 reporter gene construct to identify zsig63 agonists, and producing
 CC an anti-zsig63 antibody using zsig63 immunogenic peptides, zsig63 is
 CC useful for detecting in a test sample, the presence of antagonist of
 CC zsig63 protein activity. Zsig63 has antimicrobial activity and since
 CC exhibits high expression in salivary gland, can be used for treating
 CC dental caries, periodontal disease, thrush, and gastrointestinal
 CC disease, urinary tract infections, vaginal infections, skin infections
 CC and other epithelial wounds. The polypeptides can be used to establish
 CC normal microflora and protect against pathogenic colonization and
 CC invasion. Zsig63 can also be used for providing pro-inflammatory activity
 CC for treating chronic, tissue damage particularly in areas having limited
 CC or damaged vascular system, e.g. in diabetes, and for treating
 CC immunocompromised AIDS patients or in individuals that have undergone
 CC chemotherapy, radiation treatment, for treating lung infections e.g. in
 CC cystic fibrosis. Detection of zsig63 polypeptide at relatively high
 CC levels in the trachea may indicate that such polypeptides may serve as a
 CC marker of lung dysfunction. Zsig63 is also useful in diagnosing
 CC conditions associated with salivary gland or lung dysfunction including
 CC salivary gland carcinoma, Pneumocystis carinii infection, emphysema,
 CC chronic bronchitis, prostate dysfunctions such as prostate
 CC adenocarcinoma, aiding digestion, and as components of defined cell
 CC culture media and may be used to replace serum that is commonly used in
 CC culture. The DNA is useful in gene therapy applications to increase or
 CC inhibit zsig63 activity, and for detecting abnormalities on human
 CC chromosome 4 (e.g. 4q12-4q13, associated with dentinogenesis imperfecta,
 CC and dentin dysplasia type II). Zsig63 is an adhesin family member. The
 CC present sequence is a primer used to isolate and sequence nucleic acids
 CC encoding human zsig63
 XX
 SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;
 Query Match 0.9%; Score 25.2; DB 1; Length 26;
 Best Local Similarity 96.2%; Pred. No. 3.6e+02;
 Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 Db :|||||
 26 BAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 216
 ACF36382/C
 ID ACF36382 standard; DNA; 26 BP.
 XX
 AC ACF36382;
 XX
 XX 04-DEC-2003 (first entry)
 XX
 XX Nucleotide sequence of a second back primer.
 DE
 XX Nucleic acid manipulation; mRNA profiling; polymerase chain reaction;
 KW electrophoresis; PCR; primer; ss.
 XX
 OS Synthetic.
 XX
 XX WO2003064691-A2.
 XX
 XX 07-AUG-2003.
 XX
 XX 28-JAN-2003; 2003WO-IB000843.
 XX
 XX 29-JAN-2002; 2002US-0352215P.
 XX
 XX (GLOB-) GLOBAL GENOMICS AB.
 XX
 XX Linnarsson S, Ernfors P, Bauren G, Metsis A, Pihlak A;
 XX Montellius A;
 PI
 XX WPI; 2003-618365/58.
 XX
 XX Producing a population of double-stranded product DNA molecules, useful
 PT

PT for mRNA profiling, comprises amplification by nested polymerase chain
 PT reaction.

XX Claim 6; Page 85; 105pp; English.

XX The invention relates to producing a population of double-stranded
 CC product DNA molecules comprising amplification by a nested PCR method.
 CC The method is useful in profiling mRNA transcribed in a system under
 CC investigation. The oligonucleotides are used as size standards in
 CC electrophoresis, and as internal controls allowing for calculation of
 CC relative amounts of material present. The present sequence represents a
 CC specific example of a PCR primer used in the method of the invention

XX SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;

Query Match 0.9%; Score 25.2; DB 1; Length 26;

Best Local Similarity 96.2%; Pred. No. 3.6e+02;

Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAA 2733

Db 26 BAAAAA 1

RESULT 217

AAD55692/c

ID AAD55692 standard; DNA; 26 BP.

XX AC AAD55692;

XX XX

DT 27-OCT-2003 (revised)

DT 07-AUG-2003 (first entry)

XX XX

DE Bovine viral diarrhea virus gene 5' end amplifying PCR primer.

XX XX

KW Bovine Viral Diarrhea Virus; BVDV; infection; vaccine; prophylaxis;

KW gene therapy; PCR; primer; ss.

XX XX

OS Pestivirus type 1.

XX XX

PN WO2003023041-A2.

XX XX

PD 20-MAR-2003.

XX XX

PF 05-SEP-2002; 2002WO-EP009925.

XX XX

PR 06-SEP-2001; 2001DE-01043813.

XX XX

PA (BOEH) BOEHRINGER INGELHEIM VETMEDICA GMBH.

XX XX

PI Elbers K, Meyer C, Von Freyburg M, Meyers G;

XX XX

DR WPI; 2003-333043/31.

XX XX

PT New DNA molecule useful for manufacturing a vaccine for the prophylaxis
 PT and treatment of Bovine Viral Diarrhea Virus (BVDV) infections, comprises
 PT a sequence complementary to a BVDV RNA.

XX XX

PS Example 1; Page 20; 73pp; English.

XX XX

CC The invention relates to a DNA molecule containing a sequence
 CC complementary to a Bovine Viral Diarrhea Virus (BVDV) RNA. The RNA when
 CC introduced into susceptible host cells, induces the generation of
 CC infectious BVDV particles. The attenuated BVDV clone or strain is useful
 CC in the manufacture of a vaccine for the prophylaxis and treatment of BVDV
 CC infections. The invention is useful in gene therapy. The present sequence
 CC is a PCR primer used to amplify BVDV gene. (Updated on 27-OCT-2003 to
 CC standardise OS field)

XX XX

SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;

Query Match 0.9%; Score 25.2; DB 1; Length 26;

Best Local Similarity 96.2%; Pred. No. 3.6e+02;

Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAA 2733

Db 26 BAAAAA 1

Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAA 2733

Db 26 BAAAAA 1

RESULT 218

ADY96656/c

ID ADY96656 standard; DNA; 26 BP.

XX XX

AC ADY96656;

XX XX

DT 02-JUN-2005 (first entry)

XX XX

DE Human Zsig63 cDNA cloning and sequencing primer, ZC7231.

XX XX

KW Zsig63; microbial infection; tooth disease; antibacterial; mouth disease;
 KW dental carries; candida infection; fungicide; infection;
 KW periodontal disease; antiinflammatory; mouth disease;

KW gastrointestinal disease; genitourinary; urinary tract infection;

KW antimicrobial; uropathic; genitourinary disease;

KW female genital tract infection; antimicrobial; gynecology and obstetrics;

KW skin infection; dermatological; dermatological disease; wound healing;

KW vulnery; injury; acquired immune deficiency syndrome; anti-hiv;

KW immune disorder; cancer; cytostatic; neoplasm; lung infection;

KW antimicrobial; respiratory-gen.; respiratory disease; gene therapy;

KW primer; ss.

XX XX

OS Homo sapiens.

XX XX

PN US2005065322-A1.

XX XX

PD 24-MAR-2005.

XX XX

PF 20-OCT-2004; 2004US-00969164.

XX XX

PR 17-MAR-1999; 99US-0124820P.

XX XX

PR 17-MAR-2000; 2000US-00527345.

XX XX

PR 03-AUG-2001; 2001US-00923236.

XX XX

PA (ZYMO) ZYMOGENETICS INC.

XX XX

PI Adler DA, Sheppard PO;

XX XX

DR WPI; 2005-241320/25.

XX XX

XX New polynucleotide (I) encoding a zsig63 polypeptide, useful for

PT diagnosing and treating microbial infections, e.g. dental carries,

PT thrush, gastrointestinal disease, skin infection, or epithelial wounds,

PT AIDS, lung infections, or cancer.

XX XX

PS Example 1; SEQ ID NO 6; 33pp; English.

XX XX

CC The present invention relates to zsig63, a novel secreted salivary

CC protein and its encoding polynucleotide. Zsig63 is a member of the

CC adhesin family. The invention is useful for diagnosing and treating

CC microbial infections such as dental carries, periodontal disease, thrush,

CC gastrointestinal disease, urinary tract infection, vaginal infection,

CC skin infection or epithelial wounds and lung disfunctions such as AIDS,

CC lung infections and cancer. The invention is also useful in gene therapy.

CC This present sequence is human Zsig63 cDNA cloning and sequencing primer.

CC This sequence is used in the identification of zsig63 using an EST

CC sequence to obtain the full-length Zsig63.

XX XX

SQ Sequence 26 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 1 Other;

XX XX

Query Match 0.9%; Score 25.2; DB 1; Length 26;

Best Local Similarity 96.2%; Pred. No. 3.6e+02;

Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 26 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 219
ABQ76254/c
ID ABQ76254 standard; DNA; 27 BP.
XX
AC ABQ76254;
XX
DT 08-NOV-2002 (first entry)
XX
DE Murine SCCE 5'-RACE oligonucleotide SEQ ID 42.
XX
KW SCCE; murine; stratum corneum chymotryptic enzyme; kallikrein 7;
KW serine protease; transgenic mammal; skin; skin disease; skin cancer;
KW hyperkeratosis; acanthosis; epidermal inflammation; dermal inflammation;
KW pruritus; atopic dermatitis; eczema; acne; itch; KLK7; ss.
XX
OS Mus musculus.
XX
PN W0200262135-A2.
XX
PD 15-AUG-2002.
XX
PF 08-FEB-2002; 2002WO-IB001300.
XX
PR 09-FEB-2001; 2001CA-02332655.
PR 09-FEB-2001; 2001DK-00000218.
XX
PA (EGEL/) EGELRUD T.
PA (HANS/) HANSSON L.
XX
PI Egelrud T, Hansson L;
XX
PT WPI; 2002-643380/69.
XX
PT Transgenic mammal or its embryo useful as model for human disease, has
PT heterologous nucleotide sequence coding for stratum corneum chymotryptic
PT enzyme operably linked to promoter that drives its expression in skin.
XX
PS Example 6; Page 36; 74pp; English.
XX
CC This invention describes a novel non-human transgenic mammal or mammalian
CC embryo having integrated within its genome, a heterologous nucleotide
CC sequence comprising at least a significant part of a nucleotide sequence
CC coding for a stratum corneum chymotryptic enzyme (SCCE) or its variant,
CC operably linked to a promoter that drives expression of heterologous scce
CC or its variant in skin. The product of the invention is useful as a model
CC for the study of disease with the aim of improving treatment to relieve
CC or ameliorate a pathogenic condition, for development or testing of a
CC cosmetic or a pharmaceutical formulation, and for the development of a
CC diagnostic method. It can also be used as a model for a skin disease or
CC skin cancer. The invention is also useful for screening or identifying a
CC compound or composition effective for the prevention or treatment of an
CC abnormal or unwanted phenotype, and for screening or identifying a
CC compound or composition effective for the prevention or treatment of
CC inflammatory skin diseases selected from diseases consisting of epidermal
CC hyperkeratosis, acanthosis, epidermal inflammation, dermal inflammation,
CC pruritus, atopic dermatitis, eczema, acne and inherited skin diseases
CC with epidermal hyperkeratosis. The mammal of the invention is also useful
CC as a model for further studies of lch mechanisms and the testing of
CC potential compounds and compositions for relieve of various skin diseases
CC where itch is a component. This sequence represents a 5' RACE cDNA
CC synthesis primer used in a method of detecting homologues to human
CC stratum corneum chymotryptic enzyme, SCCE, gene. SCCE is a serine
CC protease synonymous with human kallikrein 7 (KLK7) and is used in the
CC development of the transgenic mammals described in the invention
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 2 Other;
XX
Query Match 0.9%; Score 25.2; DB 1; Length 27;
Best Local Similarity 96.2%; Pred. No. 3.7e+02;
Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2733
Db 26 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 220
AEA37617/c
ID AEA37617 standard; DNA; 27 BP.
XX
AC AEA37617;
XX
DT 28-JUL-2005 (first entry)
XX
DE Tea tree tubulin oligonucleotide #1.
XX ss; tubulin; biochip.
KW
XX Melaleuca alternifolia.
XX
PN CN1552861-A.
XX
PD 08-DEC-2004.
XX
PF 18-DEC-2003; 2003CN-01109578.
XX
PR 18-DEC-2003; 2003CN-01109578.
XX
PA (TEAC-) TEA INST CHINESE AGRIC ACAD.
XX
PI Chen L, Xu Y, Zhao L;
XX
DR WPI; 2005-197097/21.
XX
PT Tubulin differential expression sequence label of tea tree and biological
PT chip.
XX
PS Example 4; Page 19; 25pp; Chinese.
XX
CC The invention relates to specific expressive sequential labels of tubulin
CC of tea tree and their biochips. The invention can be used in evaluation
CC of crop seed sources, early prediction of hybrid vigor, research on plant
CC resistance, determination of plant SNP, inspection of transgenic crop
CC security, and screen of herbicides and agro-chemicals, etc. The present
CC sequence represents a tea tree tubulin oligonucleotide.
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 2 Other;
XX
Query Match 0.9%; Score 25.2; DB 1; Length 27;
Best Local Similarity 96.2%; Pred. No. 3.7e+02;
Matches 25; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2733
Db 26 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 221
AAQ95960/c
ID AAQ95960 standard; DNA; 25 BP.
XX
AC AAQ95960;
XX
DT 06-FEB-1996 (first entry)
XX
DE Oligonucleotide biotin-t25 for novel nucleic acid immobilisation method.
XX
KW Immobilisation; solid support; salt; cationic detergent; capture probe;
KW hybridisation; primer; template-dependent extension; target organism;
KW sequencing; genetic polymorphism; ss.
XX
OS Synthetic.

CC with amplification of target molecule. AAA39306 to AAA39316 represent
CC oligonucleotides used in the exemplification of the present invention
XX
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 0 T; 25 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 224
AAZ30267/c
ID AAZ30267 standard; DNA; 25 BP.
AC AAZ30267;
XX
DT 11-FEB-2000 (first entry)
XX
DE Capture probe CP125 specific for c-myc fusion targets.
XX
KW c-myc fusion; non-nucleoside spacer; capture probe;
KW nucleic acid-protein fusion; ribosome display particle; ss.
XX
OS Synthetic.
XX
PN WO9951773-A1.
XX
PD 14-OCT-1999.
XX
PF 31-MAR-1999; 99WO-US007203.
XX
PR 03-APR-1998; 98US-0080686P.
XX
PA (PHYL-) PHYLOS INC.
XX
PI Kuimelis RG, Wagner R;
XX
XX WPI; 2000-013048/01.
XX
XX
XX Attaching capture probes to solid phases through non-nucleic spacers,
PT producing arrays for detecting interactions of proteins with other
PT compounds, e.g. for drug screening.
XX
PS Example 8; Page 29; 57pp; English.
XX
XX The present sequence represents a capture probe specific for a c-myc
CC fusion target. It is used in the method of the invention. The
CC specification describes the use of non-nucleoside spacers to immobilise
CC an array of capture probes on a solid support. The solid support carries
CC an array of capture probes, each consisting of non-nucleoside spacers
CC plus an oligonucleotide to which a nucleic acid-protein fusion or a
CC ribosome display particle is bound. Non-nucleoside spacers prevent
CC interaction of proteins with the support surface, ensuring efficient
CC hybridisation between capture probes and bound nucleic acid/protein
CC fusions, while minimising denaturation of the protein which may then
CC adopt its native folded structure. The arrays of capture probes are used
CC to screen for interactions between proteins and compounds (e.g. other
CC proteins, ligands or nucleic acids), particularly to identify potential
CC therapeutic agents, enzyme substrates or unknown proteins that interact
CC with drugs, but also for diagnosis (detecting disease-associated
CC proteins) and for quantifying target molecules in a sample
XX
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733

Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 225
ABK49986/c
ID ABK49986 standard; DNA; 25 BP.
XX
AC ABK49986;
XX
DT 15-JUL-2002 (first entry)
XX
DE Example oligonucleotide #2 prepared on glass-synthetic resin membrane.
XX
KW Glass-synthetic resin membrane; pore glass-polytetrafluoroethylene resin;
KW chromatography membrane; PTFE; ss.
XX
OS Synthetic.
XX
PN US6261497-B1.
XX
PD 17-JUL-2001.
XX
PF 04-MAY-1999; 99US-00305219.
XX
PR 21-FEB-1996; 96US-00604440.
XX
PA (CPGC-) CPG INC.
XX
PI Wong YN, Chen R;
XX
XX WPI; 2001-534961/59.
XX
XX Preparation of controlled pore glass-polytetrafluoroethylene resin
PT chromatography membrane by heating, calendaring and sintering mixture of
PT controlled pore glass and aqueous dispersion of polytetrafluoroethylene.
XX
PS Example 12; Col 8; 6pp; English.
XX
XX The invention relates to a method of preparing a controlled pore glass-
CC polytetrafluoroethylene (PTFE) resin chromatography membrane, comprising
CC combining controlled pore glass and an aqueous dispersion of PTFE to form
CC a paste-like mass, heating the paste-like mass at 50-70 plus or minus 10 degrees C,
CC calendaring to form a foldable sheet, and sintering the sheet to produce
CC a rigid, porous sheet. The method prepares a controlled pore glass-PTFE
CC resin chromatography membrane for use in various biotechnical procedures.
CC The membrane is useful in place of controlled pore glass as a support for
CC the synthesis, isolation, and purification of nucleic acids and for the
CC isolation and purification of proteins. The method produces a membrane
CC that may be used in lieu of controlled pore glass. The present sequence
CC represents an oligonucleotide prepared on the membrane in an example
CC which demonstrates the method of the invention
XX
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 226
ADC54009/c
ID ADC54009 standard; DNA; 25 BP.
XX
AC ADC54009;
XX
DT 18-DEC-2003 (first entry)
XX
DE Oligonucleotide of the invention SEQ ID NO:4.


```

XX ss; probe carrier; discharge.
KW Synthetic.
XX
OS JP2003035711-A.
XX
PN 07-FEB-2003.
XX
PD 28-MAR-2002; 2002JP-00093023.
XX
PF 28-MAR-2001; 2001JP-00094400.
XX
PR (CANO ) CANON KK.
XX
PA WPI; 2003-535999/51.
XX
DR
XX
XX Probe carrier manufacturing method for inkjet system, involves scanning
PT liquid discharge head in direction orthogonal to scanning direction, at
PT angle satisfying predetermined relation.
XX
PS Example 2; SEQ ID NO 4; 17pp; Japanese.
XX
XX The invention relates to a novel probe carrier and the method for
CC manufacturing the carrier. The invention enables stable discharge of
CC solution, and removes liquid droplets adhering to discharge nozzle. The
CC present sequence is used in the exemplification of the invention.
XX
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
Query Match 0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred.No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
Db |||||||||||||||||||
25 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 227
ADC54008
ID ADC54008 standard; DNA; 25 BP.
XX
XX ADC54008;
XX
XX 18-DEC-2003 (first entry)
XX
XX Oligonucleotide of the invention SEQ ID NO:3.
DE ss; probe carrier; discharge.
XX
XX Synthetic.
XX
XX JP2003035711-A.
XX
XX 07-FEB-2003.
XX
XX 28-MAR-2002; 2002JP-00093023.
XX
XX 28-MAR-2001; 2001JP-00094400.
XX
XX (CANO ) CANON KK.
XX
XX WPI; 2003-535999/51.
XX
XX Probe carrier manufacturing method for inkjet system, involves scanning
PT liquid discharge head in direction orthogonal to scanning direction, at
PT angle satisfying predetermined relation.
XX
XX Example 2; SEQ ID NO 3; 17pp; Japanese.
XX
XX The invention relates to a novel probe carrier and the method for
CC manufacturing the carrier. The invention enables stable discharge of

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ID  ADF39736 standard; DNA; 25 BP.
XX  ADF39736;
AC
XX  12-FEB-2004 (first entry)
DT
XX  Target DNA sequence #3, capable of hybridising to probe #4.
DE
XX  Probe array; microarray; DNA array; DNA chip; manufacture; inkjet system;
KW  electrostatic adsorption mechanism; DNA analysis;
KW  simultaneous gene detection; ss.
XX  Synthetic.
OS
XX  JP2003014773-A.
PN
XX  15-JAN-2003.
PD
XX  28-MAR-2002; 2002JP-00093024.
PF
XX  28-MAR-2001; 2001JP-00094401.
PR
XX  (CANO ) CANON KK.
PA
XX  WPI; 2003-496695/47.
DR
XX  Manufacturing of probe carrier for carrying probes for base sequence
PT  analysis of genetic deoxyribonucleic acid and simultaneous multiple item
PT  diagnosis of gene by ink jet process while removing mist of probe
PT  solution.
XX
XX  Example 2; SEQ ID NO 3; 15pp; Japanese.
PS
XX  The invention relates to a method and device for the manufacture of a
CC  probe array. The method involves using an inkjet system to discharge a
CC  probe solution through a solution discharging head, so as to form a
CC  number of probes on a solid matrix. Mists of the probe solution generated
CC  during probe solution discharge are caught by an electrostatic adsorption
CC  mechanism. The method and device are suitable for manufacturing probe
CC  arrays for analysing DNA sequences, and for the simultaneous detection of
CC  multiple genes. The method and device of the invention prevent the
CC  scattering of probe positions and the mixing of different probe
CC  solutions. The present sequence is related to the invention.
XX
XX  Sequence 25 BP; 25 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
    Query Match      0.9%; Score 25; DB 1; Length 25;
    Best Local Similarity 100.0%; Pred. No. 3.7e+02;
    Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
    ||||||||||||||||||||||||||||
Db  1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 25

RESULT 230
AD081145/c
ID  AD081145 standard; DNA; 25 BP.
XX
XX  AD081145;
AC
XX  29-JUL-2004 (first entry)
DT
XX
DE  Prion protein polymorphic microsatellite marker consensus sequence #23.
XX
XX  gene typing; polymorphic microsatellite loci; PML;
KW  disease predisposition; microsatellite marker; prion disease;
KW  cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
KW  milk protein; hormone; transcription factor; pT7-blue-vector; sheep;
KW  microsatellite; ds.
XX
XX  Synthetic.
OS
XX

```

```

PN  DE10236711-A1.
XX
XX  26-FEB-2004.
PD
XX  09-AUG-2002; 2002DE-01036711.
PF
XX  09-AUG-2002; 2002DE-01036711.
PR
XX  (UYHO-) UNIV HOHENHEIM.
PA
XX  Geldermann H, Preuss S, Han Y;
PI  WPI; 2004-215730/21.
PD
XX
XX  Typing genes that contain polymorphic microsatellite loci, useful for
PT  identifying predisposition to disease, by amplification and determining
PT  length of amplicons.
XX
XX  Claim 9; Page 50; 64pp; German.
PS
XX  The invention describes a method of typing (M1) a gene (I) that has one
CC  or more polymorphic microsatellite loci (PML). The method comprises: PCR
CC  amplification of at least one DNA region of (I) that includes PML, using
CC  as template a DNA sample containing at least one segment of (I); and
CC  determining the length of the resulting amplicon(s). Also described are:
CC  a method of determining (M2) microsatellite markers (MM) for
CC  predisposition to a disease, associated with a gene that includes one or
CC  more PML; and prediagnosis (M3) of diseases associated with gene that
CC  include PML. The method is used to identify microsatellite markers, in a
CC  disease-related gene, that are associated with a predisposition to
CC  diseases and for prediagnosis of such diseases, especially prion diseases
CC  but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
CC  metabolic diseases; also to type genes that encode milk proteins,
CC  hormones or transcription factors. The method is simpler, quicker and
CC  particularly less expensive than known methods based on sequencing. This
CC  sequence represents a prion protein polymorphic microsatellite marker
CC  consensus sequence.
XX
XX  Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;
SQ
    Query Match      0.9%; Score 25; DB 1; Length 25;
    Best Local Similarity 100.0%; Pred. No. 3.7e+02;
    Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
    ||||||||||||||||||||||||||||
Db  25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 231
ADV86469/c
ID  ADV86469 standard; DNA; 25 BP.
XX
XX  ADV86469;
AC
XX
XX  24-MAR-2005 (first entry)
DT
XX
DE  Fluorophore-labeled biological detection oligonucleotide #2.
XX
XX  fluorophore; detection; antibody; antigen; avidin; hormone; ss.
KW
XX  Synthetic.
OS
XX  US6838244-B1.
PN
XX  04-JAN-2005.
PD
XX  18-MAY-2001; 2001US-00859736.
PF
XX  19-MAY-2000; 2000US-0205452P.
PR
XX
XX  (MONS ) MONSANTO TECHNOLOGY LLC.
PA
XX

```

```

CC oligonucleotide of the invention.
XX
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred.No. 3.7e-02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 233
AEB26392/c
ID AEB26392 standard; DNA; 25 BP.
XX
AC AEB26392;
XX
DT 22-SEP-2005 (first entry)
XX
DE DNA hybridization probe, SEQ ID NO:4.
XX
KW DNA microarray; biochip; immobilization; probe; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_binding 1. .25
FT FT /*tag= b
FT FT /bound_moiety= "Bases 25-1 of target SEQ ID NO:3"
FT FT modified_base 1
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /notes= "Optionally conjugated via 5' phosphate to (CH2)6 linker"
XX
PN US2005158738-A1.
XX
PD 21-JUL-2005.
XX
PF 06-OCT-2004; 2004US-00958348.
XX
PR 27-APR-2001; 2001JP-00133697.
PR 27-APR-2001; 2001JP-00133698.
PR 29-APR-2002; 2002US-00133675.
XX
PA (CANO ) CANON KK.
XX
PI Okamura N, Okamoto T, Kameyama M;
XX
PS WPI; 2005-532125/54.
XX

Manufacture of probe carrier for analyzing gene deoxyribonucleic acid
sequence, involves forming labeled indexes on carrier at specific
positions, and applying solutions respectively containing probes to
respective specific positions.

Example 2; SEQ ID NO 4; 24pp; English.
XX
XX The invention relates to a method for the manufacture of a DNA probe
array comprising probes of a plurality of species fixed at respective
different positions on the substrate. The method involves forming labeled
indexes on the substrate at specific positions, and applying probe-
containing solutions to these specific positions. Preferably, the method
further comprises forming a dividing wall (especially by photolithography
methods) for partitioning the specific positions on the substrate,
irradiating the substrate with plasma in a gas atmosphere containing
fluorine, and removing ingredients of the gas adhering to the specific
positions. The invention also relates to a method of identifying the
position of a target substance bonded to the probe on such a substrate by
utilizing the indexes. The probe array is used for analyzing gene
sequences or for conducting multiple genetic diagnoses. The inventive

```

CC method can provide an array substrate that prevents probe solutions being
CC applied at adjacent sites from being mixed with each other and allows the
CC probe solutions to sufficiently spread in the respective regions to
CC prevent blank areas from being produced, thereby permitting the efficient
CC production of reliable probe arrays. Sequences AEB26389-AEB26393
CC represent oligonucleotides used to illustrate the invention. The present
CC sequence represents a probe which is complementary to the target shown as
CC SEQ ID NO:3 (AEB26391) which was immobilized on a substrate according to
CC the invention.
XX
SQ Sequence 25 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
DB 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 234
AEB26391
ID AEB26391 standard; DNA; 25 BP.
AC AEB26391;
XX
DT 22-SEP-2005 (first entry)
XX
DE Fluorescently-labeled DNA target, SEQ ID NO:3.
XX
KW DNA microarray; biochip; immobilization; ss.
XX
OS Synthetic.
FH Key Location/Qualifiers
FT misc_binding 1..25
FT /*tag= b
FT modified_base 1
FT /*tag= a
FT /*tag= OTHER
FT /*note= "Optionally conjugated to fluorescent dye
FT tetramethylrhodamine"
XX
PN US2005158738-A1.
XX
PD 21-JUL-2005.
XX
PF 06-OCT-2004; 2004US-00958348.
XX
PR 27-APR-2001; 2001JP-00133697.
PR 27-APR-2001; 2001JP-00133698.
PR 29-APR-2002; 2002US-00133675.
XX
PA (CANO) CANON KK.
XX
PI Okamura N, Okamoto T, Kameyama M;
XX
WI; 2005-532125/54.

Manufacture of probe carrier for analyzing gene deoxyribonucleic acid
sequence, involves forming labeled indexes on carrier at specific
positions, and applying solutions respectively containing probes to
respective specific positions.
XX
PS Example 2; SEQ ID NO 3; 24pp; English.
XX
The invention relates to a method for the manufacture of a DNA probe
array comprising probes of a plurality of species fixed at respective
different positions on the substrate. The method involves forming labeled
indexes on the substrate at specific positions, and applying probe-
containing solutions to these specific positions. Preferably, the method

CC further comprises forming a dividing wall (especially by photolithography
CC methods) for partitioning the specific positions on the substrate,
CC irradiating the substrate with plasma in a gas atmosphere containing
CC fluorine, and removing ingredients of the gas adhering to the specific
CC positions. The invention also relates to a method of identifying the
CC position of a target substance bonded to the probe on such a substrate by
CC utilizing the indexes. The probe array is used for analyzing gene
CC sequences or for conducting multiple genetic diagnoses. The inventive
CC method can provide an array substrate that prevents probe solutions being
CC applied at adjacent sites from being mixed with each other and allows the
CC probe solutions to sufficiently spread in the respective regions to
CC prevent blank areas from being produced, thereby permitting the efficient
CC production of reliable probe arrays. Sequences AEB26389-AEB26393
CC represent oligonucleotides used to illustrate the invention. The present
CC sequence represents a tetramethylrhodamine-labeled model target sequence
CC which is complementary to the probe shown as SEQ ID NO:4 (AEB26392).
XX
SQ Sequence 25 BP; 25 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
DB 1 AAAAAAAAAAAAAAAAAAAAAAAAAA 25

RESULT 235
AAX07466/c
ID AAX07466 standard; cDNA; 26 BP.
XX
AC AAX07466;
XX
DT 08-JUN-1999 (first entry)
XX
DE Human BS124 specific EST clone oligonucleotide.
XX
KW BS124; breast; cancer; detection; diagnosis; prevention; treatment; EST;
KW ss.
XX
OS Synthetic.
XX
PN WO9859049-A1.
XX
PD 30-DEC-1998.
XX
PF 19-JUN-1998; 98WO-US012862.
XX
PR 20-JUN-1997; 97US-00879354.
XX
PA (ABBO) ABBOTT LAB.
XX
PI Billing-Medel PA, Cohen M, Colpitts TL, Friedman PN, Gordon J;
PI Granados EN, Hodges SC, Klass MR, Kratochvil JD, Russell JC;
PI Scheffel CP, Stroupe SD, Yu H;
XX
WI; 1999-105623/09.
XX
New isolated BS124 polynucleotides and polypeptides - used for detecting,
PT diagnosing, preventing or treating diseases or conditions of the breast,
PT such as breast cancer.
XX
PS Disclosure; Page 97; 125pp; English.
XX
The sequence is that of an oligonucleotide used in the isolation of a
CC BS124-specific EST clone. It is useful for detecting, diagnosing,
CC staging, preventing or treating, or determining predisposition to
CC diseases or conditions of the breast, such as breast cancer
XX
SQ Sequence 26 BP; 0 A; 0 C; 1 G; 25 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 25; DB 1; Length 26;

```
Best Local Similarity 100.0%; Pred. No. 3.7e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 25; Conservative 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 236
AAAX78723/c
ID AAX78723 standard; DNA; 26 BP.
AC AAX78723;
XX
DT 03-SEP-1999 (first entry)
DE Human pancreatic PA153 EST-specific clone primer 12.
KW Pancreatic disease; PA153; human; cytostatic; detection; antigen;
KW anti-PA153; antagonist; therapy; treatment; tumour; metastasis;
KW gene therapy; EST; expressed sequence tag; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
FN WO9931274-A2.
XX
PD 24-JUN-1999.
XX
PF 11-DEC-1998; 98WO-US026441.
XX
PR 15-DEC-1997; 97US-00990568.
XX
PA (ABBO ) ABBOTT LAB.
PI Billing-Medel PA, Cohen M, Colpitts TL, Friedman PN, Gordon J;
PI Granados EN, Hodges SC, Klass MR, Kratochvil JD, Roberts-Rapp L;
PI Russell JC, Stroupe SD;
XX
DR WPI; 1999-405041/34.
XX
PT PA153 cDNA transcribed from pancreatic tissue.
XX
PS Example 2; Page 121; 123pp; English.
XX
CC This invention describes novel contiguous and partially overlapping cDNA
CC sequences and their encoded polypeptides, designated PA153, transcribed
CC from human pancreatic tissue and which have cytostatic activity. The
CC PA153 polynucleotides, proteins and antibodies are all useful in methods
CC of detection. Detection of PA153 polynucleotide, antigens or anti-PA153
CC antibodies in a sample is indicative of pancreatic disease. PA153
CC antibodies (antagonists) can also be used in vivo for therapeutic use,
CC e.g. treatment of pancreatic disease, tumours or metastases. Antisense
CC PA153 polynucleotides can be used in gene therapy of pancreatic diseases.
CC AAX78712-X78725 represent primers used in the method of the invention
XX
SQ Sequence 26 BP; 0 A; 0 C; 1 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 237
AAI73048/c
ID AAI73048 standard; DNA; 26 BP.
XX
AC AAI73048;
XX
DT 09-APR-2002 (first entry)
DE Human zalphall Ligand sequencing primer ZC7764b.
KW Cytokine; zalphall Ligand; zalphall receptor; NK cell progenitor;
KW natural killer cell proliferation; T-cell proliferation;
KW B-cell proliferation; anti-tumour response; immune system;
KW immunostimulant; cytostatic; human; sequencing primer; ss.
XX
OS Homo sapiens.
XX
FN US6307024-B1.
XX
```

```
DT 24-OCT-2002 (first entry)
XX Scaffold oligonucleotide.
DE
XX
KW Molecular scaffold; fluorophore; fluorescence; energy transfer;
KW emission wavelength; excitation wavelength; multiple; single nucleotide;
KW polymorphism; ss.
XX
OS Synthetic.
XX
FN WO200222883-A1.
XX
PD 21-MAR-2002.
XX
PF 11-SEP-2001; 2001WO-US028967.
XX
PR 11-SEP-2000; 2000US-00658077.
PR 31-JUL-2001; 2001US-0309156P.
XX
PA (UYCO ) UNIV COLUMBIA NEW YORK.
XX
PI Ju J, Li Z, Tong A, Russo JJ;
XX
DR WPI; 2002-575158/61.
XX
PT Composition of matter useful for multi-component analyses, comprises
PT multiple fluorophores bound to molecular scaffold at preset positions to
PT permit fluorescence energy transfer between two fluorophores.
XX
PS Disclosure; Page 43; 113pp; English.
XX
CC This sequence represents a molecular scaffold which may be used in a
CC composition of matter comprising multiple fluorophores. The fluorophores
CC are bound to the molecular scaffold at separate predetermined positions,
CC to permit fluorescence energy transfer between two fluorophores. The
CC fluorophores are characterized by maximum emission wavelength of one
CC being greater than the minimum excitation wavelength of the other. The
CC composition is useful for determining whether a preselected nucleotide
CC residue is present at a predetermined position within a nucleic acid. It
CC is also useful in multicomponent analysis including multiplex biological
CC analysis, and identifying multiple single nucleotide polymorphisms. The
CC presence of a number of given nucleotide residues is determined
CC simultaneously by the composition of the invention
XX
SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 238
AAS20672/c
ID AAS20672 standard; DNA; 26 BP.
XX
AC AAS20672;
XX
DT 09-APR-2002 (first entry)
DE Human zalphall Ligand sequencing primer ZC7764b.
KW Cytokine; zalphall Ligand; zalphall receptor; NK cell progenitor;
KW natural killer cell proliferation; T-cell proliferation;
KW B-cell proliferation; anti-tumour response; immune system;
KW immunostimulant; cytostatic; human; sequencing primer; ss.
XX
OS Homo sapiens.
XX
FN US6307024-B1.
XX
```

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XX PD 23-OCT-2001.
XX PF
XX PF 09-MAR-2000; 2000US-00522217.
XX PR
XX PR 09-MAR-1999; 99US-0123547P.
XX PR 11-MAR-1999; 99US-0123904P.
XX PR 01-JUL-1999; 99US-0142013P.
XX PR
XX PA (ZYMO ) ZYMOGENETICS INC.
XX PI Novak JE, Preenell SR, Sprecher CA, Foster DC, Holly RD;
XX PI Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
XX PI WPI; 2002-040208/05.
XX PR
XX PR New zalphall ligand polypeptides and polynucleotides, useful for
XX PT stimulating proliferation, activation, differentiation and/or induction
XX PT of inhibition of specialized cell function, or for stimulating an
XX PT antigenic response.
XX PS
XX PS Example 7; Col 139; 105pp; English.
XX CC The present invention relates to the isolation of a novel cytokine,
XX CC zalphall ligand and the polynucleotide encoding it. The invention also
XX CC gives the sequence for the zalphall receptor and the polynucleotide
XX CC encoding it. The zalphall ligand polypeptide stimulates proliferation of
XX CC natural killer (NK) cells or NK cell progenitors, the activation of NK
XX CC cells, proliferation of T-cells, proliferation of B-cells stimulated with
XX CC anti-CD40 antibodies, stimulates an antigenic response in a mammal, and
XX CC reduces proliferation of B-cells stimulated with anti-IgM antibodies. The
XX CC zalphall ligand polypeptide is also useful in preparing antibodies that
XX CC bind to zalphall ligand epitopes. The zalphall ligand polynucleotides can
XX CC be used as probes or primers to clone regions of a zalphall ligand gene,
XX CC and in gene therapy. Zalphall Ligand may also be used to identify
XX CC inhibitors of its activity, to enhance the generation of anti-tumour
XX CC responses with or without the infusion of donor lymphocytes, and to
XX CC activate or stimulate the immune system. The present sequence represents
XX CC a sequencing primer used to sequence cDNA clones in the isolation of
XX CC human zalphall ligand
XX SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 239
ABX93461/c
ID ABX93461 standard; DNA; 26 BP.
AC
AC ABX93461;
XX
XX 27-MAY-2003 (first entry)
XX
XX LS147-specific polynucleotide sequencing related universal primer #1.
XX
XX LS147; cancer; lung cancer; gene therapy; cytostatic; ss; sequencing;
XX KW primer; EST clone; expressed sequence tag clone.
XX
XX Synthetic.
XX
XX US2002188114-A1.
XX PN
XX
XX 12-DEC-2002.
XX PD
XX 05-JUN-1998; 98US-00092296.
XX PF
XX

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PR 05-JUN-1997; 97US-0048810P.
XX
XX (BILL/) BILLINGEL P.
XX PA (COHE/) COHEN M.
XX PA (COLP/) COLPITTS T L.
XX PA (FRIE/) FRIEDMAN P N.
XX PA (KLAS/) KLASS M R.
XX PA (RUSS/) RUSSELL J C.
XX PA (STRO/) STROUPE S.
XX
XX Billengel P, Cohen M, Colpitts TL, Friedman PN, Klass MR;
XX Russell JC, Stroupe S;
XX WPI; 2003-341045/32.
XX
XX New LS147 polypeptide, useful for preparing a composition for treating
XX PT e.g., lung cancer.
XX PT
XX PS Example 2; Page 39; 47pp; English.
XX PS
XX CC The invention describes a purified polypeptide or its fragment derived
XX CC from the LS147 gene capable of selectively hybridizing to the nucleic
XX CC acid of the gene and has at least 50% identity with the polynucleotide.
XX CC The LS147 polypeptide is useful for preparing a composition for treating
XX CC cancer, e.g. lung cancer using gene therapy. This sequence represents a
XX CC universal primer used to sequence LS147 expressed sequence tag (EST)-
XX CC clones
XX SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 3.7e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 240
ADH44609/c
ID ADH44609 standard; DNA; 26 BP.
AC
AC ADH44609;
XX
XX 25-MAR-2004 (first entry)
XX
XX Human cDNA encoding Zalphall sequencing primer #3.
XX
XX Human; ss; Zalphall ligand; Zalphall receptor; immune response;
XX KW tumour progression; metastasis; tumour stasis; haematopoietic tumour;
XX KW lymphoma; B cell tumour; systemic lupus erythematosus;
XX KW rheumatoid arthritis; myasthenia gravis; diabetes; infectious disease;
XX KW immunocompromised patient; HIV infection; vaccine; primer.
XX
XX Homo sapiens.
XX
XX US6605272-B2.
XX
XX 12-AUG-2003.
XX
XX 03-AUG-2001; 2001US-00923246.
XX
XX 09-MAR-1999; 99US-0123547P.
XX PR 11-MAR-1999; 99US-0123904P.
XX PR 01-JUL-1999; 99US-0142013P.
XX PR 09-MAR-2000; 2000US-00522217.
XX
XX (ZYMO ) ZYMOGENETICS INC.
XX
XX Novak JE, Preenell SR, Sprecher CA, Foster DC, Holly RD;
XX PI Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;
XX

```

DR WPI; 2003-895283/82.

XX Stimulating an immune response in a mammal exposed to an antigen or

PT pathogen, useful for enhancing anti-tumor activity resulting in reduced

PT tumor progression or metastasis, comprises administering zalphall ligand

PT polypeptide.

XX Example 7; SEQ ID NO 39; 103pp; English.

XX The invention relates to stimulating an immune response in a mammal

CC exposed to an antigen or pathogen comprising administering a composition

CC comprising mature zalphall ligand polypeptide comprising residues 32-162

CC of ADH44572 in a pharmaceutical vehicle. Also included are stimulating an

CC immune response in a mammal exposed to an antigen or pathogen

CC (comprising: (a) determining (indirectly) the level of antigen or

CC pathogen present in the mammal; (b) administering a composition

CC comprising zalphall ligand polypeptide in a pharmaceutical vehicle; (c)

CC determining (indirectly) the level of antigen or pathogen in the mammal;

CC and (d) comparing the antigen or pathogen level in (a) with (b), where a

CC change in the level indicates stimulation of immune response), and

CC stimulating an immune response in a mammal exposed to an antigen or

CC pathogen (comprising: (a) determining a level of antigen- or pathogen-

CC specific antibody; (b) administering a composition comprising zalphall

CC ligand polypeptide in a pharmaceutical vehicle; (c) determining a post

CC administration level of the antigen- or pathogen-specific antibody; and

CC (d) comparing the level of the antibody in (a) with (b), where an

CC increase in the antibody level indicates stimulation of immune response).

CC The method is useful for stimulating an immune response in a mammal

CC exposed to an antigen or pathogen, and for enhancing anti-tumor activity

CC resulting in a reduction in tumour progression, decrease in metastasis,

CC or tumour stasis. The tumour may be a haematopoietic tumour, a lymphoma

CC or a B cell tumour. The zalphall ligand is useful for treating a wide

CC range of diseases arising from defects in the immune system, e.g.

CC systemic lupus erythematosus, rheumatoid arthritis, myasthenia gravis, or

CC diabetes, for boosting immunity to infectious diseases, treating

CC immunocompromised patients, such as HIV+ patients and in improving

CC vaccines. The present sequence is a sequencing primer used in the

CC exemplification of the invention.

XX

SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;

Best Local Similarity 100.0%; Pred. No. 3.7e+02;

Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733

Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 241

AD100945/c

ID AD100945 standard; DNA; 26 BP.

XX AD100945;

AC

DT 22-APR-2004 (first entry)

XX Sequencing primer SEQ 39 used to analyse human zalphall ligand clone DNA.

XX zalphall ligand; immunity; infectious disease; immunocompromised patient;

XX HIV; vaccine; human; ss; PCR; primer.

XX Homo sapiens.

XX

XX US2003125524-A1.

PN

PD 03-JUL-2003.

XX

XX 15-NOV-2002; 2002US-00295723.

PF

XX

XX 09-MAR-2000; 2000US-00522217.

PR

XX

PA (ZYMO) ZYMOGENETICS INC.

XX Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;

PI Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;

XX WPI; 2003-811003/76.

DR

XX New zalphall ligand polypeptides, useful for boosting immunity to

PT infectious diseases, and treating immunocompromised patients, such as

PT human immunodeficiency virus (HIV) patients, or in improving vaccines.

XX

XX Example 7; SEQ ID NO 39; 113pp; English.

PS

XX The invention relates to a novel isolated zalphall ligand polypeptide.

CC The polypeptide of the invention may be useful for boosting immunity to

CC infectious diseases and treating immunocompromised patients, such as HIV

CC patients, as well as in improving vaccines. The current sequence is that

CC of the PCR primer which was used in the exemplification of the invention.

XX

SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;

Best Local Similarity 100.0%; Pred. No. 3.7e+02;

Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733

Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 242

ADP19768/c

ID ADP19768 standard; DNA; 26 BP.

XX ADP19768;

AC

DT 26-AUG-2004 (first entry)

XX Human zalphall ligand PCR primer seqid 39.

XX

XX cytostatic; zalphall ligand; pharmaceutical; cancer; immune response;

KW melanoma; tumour; solid tumour; haematopoietic tumour; lymphoma; human;

KW PCR; primer; ss.

XX

XX Homo sapiens.

OS

XX US2004110932-A1.

PN

PD 10-JUN-2004.

XX

XX 10-SEP-2003; 2003US-00659684.

PF

XX 09-MAR-1999; 99US-0123547P.

PR

XX 11-MAR-1999; 99US-0123904P.

PR

XX 01-JUL-1999; 99US-0142013P.

PR

XX 09-MAR-2000; 2000US-00522217.

PR

XX (ZYMO) ZYMOGENETICS INC.

PA

XX Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;

PI Gross JA, Johnston JV, Nelson AJ, Dillon SR, Hammond AK;

XX WPI; 2004-440401/41.

DR

XX New zalphall ligand polynucleotide and polypeptide molecules, useful for

PT treating cancer, e.g. melanoma, solid tumor, hematopoietic tumor, or

PT lymphoma.

XX

XX Example 7; SEQ ID NO 39; 111pp; English.

PS

XX The invention describes an isolated polypeptide comprising a sequence of

CC amino acid residues that is at least 90 or 95% identical to residues 41

CC (Gln) to 148 (Ile), or 32 (Gln) to 148 (Ile) of a sequence of 162 amino

CC

CC acids (SEQ ID NO:2, human zalphall ligand), fully defined in the
 CC specification. Also described are: a pharmaceutical composition
 CC comprising the polypeptide, and a vehicle; a method of treating cancer in
 CC a mammal; a method of stimulating an immune response in a mammal with
 CC melanoma; a method of stimulating an immune response in a mammal bearing
 CC a tumour; an isolated polynucleotide comprising a sequence of nucleotides
 CC that encode amino acid residues cited above, where the polynucleotide
 CC encodes a polypeptide that binds a receptor comprising 538 amino acids,
 CC fully defined in the specification; a pharmaceutical composition
 CC comprising the polynucleotide encoding, in a pharmaceutically acceptable
 CC vehicle, an expression vector comprising the following operably linked
 CC elements a control element; and a DNA segment comprising the
 CC polynucleotide; and an isolated polynucleotide molecule comprising at
 CC least 10 nucleotides of the polynucleotide sequence of 642 bp, fully
 CC defined in the specification. The molecules, compositions and methods are
 CC useful for treating cancer, e.g. melanoma, solid tumour, haematopoietic
 CC tumour, or lymphoma. This sequence represents a primer used in the
 CC expression cloning of human cytokine zalphall ligand.
 XX
 SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 |||||
 Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 243
 ADV96392/c
 ID ADV96392 standard; DNA; 26 BP.
 XX
 AC ADV96392;
 XX
 XX 10-MAR-2005 (first entry)
 XX
 DE Human zalphall ligand-specific PCR primer - SEQ ID 39.
 XX
 XX stem cell; cell culture; PCR; primer; ss; zalphall ligand.
 XX
 KW Homo sapiens.
 XX
 OS US2004260065-A1.
 XX
 PN 23-DEC-2004.
 XX
 XX 26-FEB-2004; 2004US-00787442.
 XX
 PF 09-MAR-1999; 99US-0123547P.
 XX
 PR 11-MAR-1999; 99US-0123904P.
 XX
 PR 01-JUL-1999; 99US-0142013P.
 XX
 PR 09-MAR-2000; 2000US-00522217.
 XX
 XX (NOVA/) NOVAK J E.
 PA (PRES/) PRESNELL S R.
 PA (SPRE/) SPRECHER C A.
 PA (FOS/) FOSTER D C.
 PA (HOL/) HOLLY R D.
 PA (GROS/) GROSS J A.
 PA (JOHN/) JOHNSTON J V.
 PA (NELS/) NELSON A J.
 PA (DILL/) DILLON S R.
 PA (HAMM/) HAMMOND A K.

XX Novak JE, Presnell SR, Sprecher CA, Foster DC, Holly RD;
 PI Gross JA, Johnston JV, Nelson AJ, Dillion SR, Hammond AK;
 XX WPI; 2005-038783/04.
 DR
 XX New zalphall 11 Ligand fusion protein, useful for stimulating the
 XX proliferation and/or development of hematopoietic cells in vitro and in
 PT

PT vivo, and in autologous marrow culture.
 XX
 PS Example 7; SEQ ID NO 39; 110pp; English.

XX The invention comprises a fusion protein that contains a zalphall ligand
 CC and a cytokine polypeptide (e.g. IL-2, IL-4, IL-15 or GM-CSF), the fusion
 CC protein of the invention binds to the human receptor protein. The protein
 CC of the invention is useful for stimulating the proliferation and/or
 CC development of hematopoietic cells. The protein of the invention is also
 CC useful in autologous marrow culture. The present DNA sequence represents
 CC a PCR primer that was used in an example of the invention.

XX Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 |||||
 Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 244
 ADM14179/c
 ID ADM14179 standard; DNA; 26 BP.

XX
 AC ADM14179;
 XX
 DT 07-APR-2005 (first entry)
 XX
 XX Universal primer SEQ ID 10.
 DE
 XX Sequencing: primer; ss.
 KW
 XX Synthetic.
 OS
 XX US2005019820-A1.
 PN
 XX 27-JAN-2005.

XX 25-AUG-2004; 2004US-00925448.
 XX
 PF 05-JUN-1997; 97US-0048810P.
 XX
 PR 05-JUN-1998; 98US-00092296.
 XX
 XX (BILL/) BILLING-MEDEL P A.
 PA (COHE/) COHEN M.
 PA (COLP/) COLPITTS T L.
 PA (FRIE/) FRIEDMAN P N.
 PA (KLAS/) KLAS M R.
 PA (RUS/) RUSSELL J C.
 PA (STRO/) STROUPE S D.

XX Billing-Medel PA, Cohen M, Colpitts TL, Friedman PN, Klass MR;
 PI Russell JC, Stroupe SD;
 XX WPI; 2005-121297/13.
 XX

XX New polynucleotide encoding LS147 polypeptide, useful for detecting,
 PT diagnosing, staging, preventing or treating lung diseases, e.g. lung
 PT cancer, pneumonia, asthma, or adult respiratory distress syndrome.
 PT

XX Example 2; SEQ ID NO 10; 47pp; English.

XX The present invention relates to novel purified polynucleotides (I;
 CC ADM14170-ADM14176) and proteins (ADM14184-ADM14187) derived from lung
 CC tissue gene LS147. The proteins are useful for detecting, diagnosing,
 CC staging, monitoring, prognosticating, in vivo imaging, preventing or
 CC treating diseases of the lung, e.g. lung cancer, pneumonia (of all
 CC origins including viral, bacterial, and fungal), asthma, black lung
 CC disease, or adult respiratory distress syndrome. Recombinant constructs
 CC comprising (I) can be produced using, e.g. plasmid pINCY, which contains

CC universal priming sites adjacent to the 3' and 5' ligation junctions of
 CC the inserts. The present sequence is a universal primer used to sequence
 CC the LSI47 inserts cloned in pINCY.

XX SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;
 Query Match 0.9%; Score 25; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
 |||||
 Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 245

AEC01876

ID AEC01876 standard; DNA; 26 BP.

XX AC AEC01876;

XX DT 20-OCT-2005 (first entry)

XX DE Nucleotide sequence of leader sequence #1 of 5'-UTR.

XX leader sequence; mRNA translation; cell-free system; protein production;

XX ss.

XX KW Synthetic.

XX OS WO2005075644-A2.

XX PN 18-AUG-2005.

XX PD 04-FEB-2005; 2005WO-EP001146.

XX PF 06-FEB-2004; 2004RU-00103495.

XX PR (HOFF) ROCHE DIAGNOSTICS GMBH.

XX PA (HOFF) HOFFMANN LA ROCHE & CO AG F.

XX PI (PROT=) INST PROTEIN RES.

XX PI Gudkov AT, Ozerova MV, Shiryayev VM, Spirin A;

XX WPI; 2005-555940/56.

XX New leader sequence containing a poly(A) sequence from 5A to 35A or

XX containing an additional sequence linked to the complete or deleted

XX construct of poly(A) sequence, useful for synthesizing polypeptides in a

XX cell-free system.

XX Claim 2; SEQ ID NO 1; 26pp; English.

XX The specification describes a leader sequence that enhances mRNA

XX translation in a cell-free system. The leader sequence contains a poly(A)

XX sequence from 5A to 35A, an additional sequence linked to the complete or

XX deleted construct of poly(A) sequence, or at least one nucleotide

XX substitution either in the complete or deleted poly(A) sequence. The

XX leader sequence is inserted in a 5'-untranslated region (5'-UTR) adjacent

XX to the site of initiation of translation. Leader sequences of the

XX invention are useful for synthesizing polypeptides in a cell-free system.

XX The present sequence represents a leader sequence of the invention,

XX comprising 25 adenosine nucleotides.

XX SQ Sequence 26 BP; 25 A; 0 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;

Best Local Similarity 100.0%; Pred. No. 3.7e+02;

Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733

|||||

Db 2 AAAAAAAAAAAAAAAAAAAAAA 26

CC universal priming sites adjacent to the 3' and 5' ligation junctions of
 CC the inserts. The present sequence is a universal primer used to sequence
 CC the LSI47 inserts cloned in pINCY.

XX SQ Sequence 26 BP; 0 A; 1 C; 0 G; 25 T; 0 U; 0 Other;
 Query Match 0.9%; Score 25; DB 1; Length 26;
 Best Local Similarity 100.0%; Pred. No. 3.7e+02;
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
 |||||
 Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 245

AEC01876

ID AEC01876 standard; DNA; 26 BP.

XX AC AEC01876;

XX DT 20-OCT-2005 (first entry)

XX DE Nucleotide sequence of leader sequence #1 of 5'-UTR.

XX leader sequence; mRNA translation; cell-free system; protein production;

XX ss.

XX KW Synthetic.

XX OS WO2005075644-A2.

XX PN 18-AUG-2005.

XX PD 04-FEB-2005; 2005WO-EP001146.

XX PF 06-FEB-2004; 2004RU-00103495.

XX PR (HOFF) ROCHE DIAGNOSTICS GMBH.

XX PA (HOFF) HOFFMANN LA ROCHE & CO AG F.

XX PI (PROT=) INST PROTEIN RES.

XX PI Gudkov AT, Ozerova MV, Shiryayev VM, Spirin A;

XX WPI; 2005-555940/56.

XX New leader sequence containing a poly(A) sequence from 5A to 35A or

XX containing an additional sequence linked to the complete or deleted

XX construct of poly(A) sequence, useful for synthesizing polypeptides in a

XX cell-free system.

XX Claim 2; SEQ ID NO 1; 26pp; English.

XX The specification describes a leader sequence that enhances mRNA

XX translation in a cell-free system. The leader sequence contains a poly(A)

XX sequence from 5A to 35A, an additional sequence linked to the complete or

XX deleted construct of poly(A) sequence, or at least one nucleotide

XX substitution either in the complete or deleted poly(A) sequence. The

XX leader sequence is inserted in a 5'-untranslated region (5'-UTR) adjacent

XX to the site of initiation of translation. Leader sequences of the

XX invention are useful for synthesizing polypeptides in a cell-free system.

XX The present sequence represents a leader sequence of the invention,

XX comprising 25 adenosine nucleotides.

XX SQ Sequence 26 BP; 25 A; 0 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 26;

Best Local Similarity 100.0%; Pred. No. 3.7e+02;

Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733

|||||

Db 2 AAAAAAAAAAAAAAAAAAAAAA 26

RESULT 246

AAV71936/C

ID AAV71936 standard; DNA; 27 BP.

XX AC AAV71936;

XX DT 18-FEB-1999 (first entry)

XX DE Anchored poly T RT-PCR primer.

XX Normalised; cDNA library; mRNA cloning; reverse transcription;

XX KW immobilise; screening; hybridisation; nucleic acid amplification;

XX KW expression pattern; drug development; PCR primer; RT-PCR; ss.

XX OS Synthetic.

XX PN WO9851789-A2.

XX PD 19-NOV-1998.

XX PF 13-MAY-1998; 98WO-DK000186.

XX PR 13-MAY-1997; 97DK-00000547.

XX PR 19-MAY-1997; 97US-00871030.

XX PR 27-MAR-1998; 98DK-00000432.

XX PA (DISP-) DISPLAY SYSTEMS BIOTECH APS.

XX PI Warthoe PR;

XX WPI; 1999-009772/01.

XX Preparation of normalised, subdivided cDNA libraries from mRNA - by

XX reverse transcription and amplification, used to screen for new genes and

XX interacting proteins, potential drugs, and for diagnosis.

XX Example 1; Page 29; 71pp; English.

XX The invention relates to preparation of a normalised, subdivided library

XX of amplified cDNA from the coding regions of mRNA in a sample. The method

XX involves reverse transcription, with at least one cDNA primer of formula

XX 5'-Con1-dTn2-Vn3-Nn4 to form first stand cDNA where Con1 = any sequence

XX of 1-100 nucleotides; dT = deoxythymidyl; n2 is at least 1; n3 and n4

XX are both 0, or n3 is 1 and n4 is at least 1; followed by second strand

XX cDNA synthesis using the first strand as template and a second cDNA

XX primer of a similar formula, in the presence of DNA polymerase I (or its

XX Klenow fragment) and amplification of double-stranded cDNA with a set of

XX amplification primers. Comparison of cDNA in the prepared library with a

XX database (a computer-generated list of molecular weights of restricted

XX DNA fragments of known sequence) is used to determine presence of an

XX expressed protein in a cell, also to detect changes in such expression

XX (particularly for diagnosis of disease). Surfaces (chip) having amplified

XX cDNA stably immobilised on it, obtained by a similar method, are used to

XX screen for genes of a particular family, by hybridisation with nucleic

XX acid from the family (to identify new genes) and to detect differences in

XX expression patterns between cells. The polypeptides expressed by the

XX libraries can be used for drug development. Sequences AAV71935 to

XX AAV71946 represent primers used to exemplify the method of the invention

XX SQ Sequence 27 BP; 0 A; 1 C; 1 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 25; DB 1; Length 27;

Best Local Similarity 100.0%; Pred. No. 3.8e+02;

Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733

|||||

Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 247

```

ABS53863/c
ID ABS53863 standard; DNA; 27 BP.
XX
AC ABS53863;
XX
DT 25-NOV-2002 (first entry)
XX
DE Human androgen receptor complex-associated protein 5'RACE PCR primer #1.
XX
KW Human; androgen receptor complex-associated protein; ARCAP; primer; ss;
KW androgen receptor; AR; cancer; liver tumour; cytostatic; PCR; 5'RACE.
XX
OS Homo sapiens.
XX
PN BP127150-A2.
XX
PD 31-JUL-2002.
XX
PF 16-JAN-2002; 2002BP-00250305.
XX
PR 17-JAN-2001; 2001US-0262312P.
PR 12-FEB-2001; 2001US-00781693.
XX
PA (VETE-) VETERANS GEN HOSPITAL.
XX
PI Tai-Jay C;
XX
DR WPI; 2002-676576/73.
XX
PD Novel substantially pure androgen receptor (AR) complex-associated
PT protein which binds to AR and increases ability of AR to transactivate
PT androgen-responsive gene, useful as drug target for treating liver
PT cancer.
XX
PS Example; Page 11; 26pp; English.
XX
CC The invention relates to an androgen receptor complex-associated protein
CC (ARCAP) sequence and the cDNA encoding it. The protein is useful for
CC screening a compound that decreases AR-mediated (androgen receptor
CC mediated) transactivation which involves contacting the ARCAP protein
CC with a protein complex comprising an AR in the presence of a candidate
CC compound, measuring the extent of binding between the polypeptide, and
CC determining if the extent of binding is less than the extent of binding
CC between the polypeptide and the protein complex in the absence of the
CC candidate compound. The ARCAP DNA is useful for determining if a sample
CC contains cancerous cells which involves providing a sample from a human
CC patient and detecting ARCAP expression in the sample. The sequences are
CC useful for determining whether a sample contains liver tumour cells. This
CC sequence represents a 5'RACE PCR primer used to amplify human ARCAP DNA
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 2 Other;
XX
Query Match 0.9%; Score 25; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 248
ABS54324/c
ID ABS54324 standard; DNA; 27 BP.
XX
AC ABS54324;
XX
DT 10-DEC-2002 (first entry)
XX
DE Human ARCAP associated 5'RACE PCR primer.
XX
KW Human; androgen receptor complex-coupled protein; ARCAP; PCR; primer; ss.
XX
ABS53863/c
ID ABS53863 standard; DNA; 27 BP.
XX
AC ABS53863;
XX
DT 25-NOV-2002 (first entry)
XX
DE Human androgen receptor complex-associated protein 5'RACE PCR primer #1.
XX
KW Human; androgen receptor complex-associated protein; ARCAP; primer; ss;
KW androgen receptor; AR; cancer; liver tumour; cytostatic; PCR; 5'RACE.
XX
OS Homo sapiens.
XX
PN BP127150-A2.
XX
PD 31-JUL-2002.
XX
PF 16-JAN-2002; 2002BP-00250305.
XX
PR 17-JAN-2001; 2001US-0262312P.
PR 12-FEB-2001; 2001US-00781693.
XX
PA (VETE-) VETERANS GEN HOSPITAL.
XX
PI Tai-Jay C;
XX
DR WPI; 2002-676576/73.
XX
PD Novel substantially pure androgen receptor (AR) complex-associated
PT protein which binds to AR and increases ability of AR to transactivate
PT androgen-responsive gene, useful as drug target for treating liver
PT cancer.
XX
PS Example; Page 15; 18pp; Japanese.
XX
CC The present invention relates to the isolation of human androgen receptor
CC complex-coupled protein (ARCAP), and the polynucleotide sequence encoding
CC it. The ARCAP polypeptide complexes with an androgen receptor to increase
CC the activity of the androgen receptor, transactivating the androgen
CC responding gene. The invention also describes a vector containing the
CC ARCAP polynucleotide sequence, and a host cell containing the ARCAP
CC polynucleotide sequence. The ARCAP polypeptide can be used as a treating
CC agent. The present sequence represents a PCR primer used in the example
CC of the present invention
XX
SQ Sequence 27 BP; 0 A; 0 C; 0 G; 25 T; 0 U; 2 Other;
XX
Query Match 0.9%; Score 25; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 249
ADG75349/c
ID ADG75349 standard; DNA; 27 BP.
XX
AC ADG75349;
XX
DT 11-MAR-2004 (first entry)
XX
DE RT-PCR primer oligo dT used to amplify KDR-related RNA.
XX
KW multivalent compound; binding group; cytostatic; antirheumatic;
KW antiarthritic; antipsoriatic; antidiabetic; ophthalmological;
KW antiarteriosclerotic; antiulcer; vasotropic;
KW receptor tyrosine kinase inhibitor; angiogenesis; hyperproliferation;
KW tumour; rheumatoid arthritis; psoriasis; diabetic retinopathy;
KW atherosclerosis; ulcer; restenosis; contraceptive;
KW uterine neovascularisation; KDR; kinase domain region; ss; PCR; primer;
KW RT-PCR.
XX
OS Unidentified.
XX
PN WO2003084574-A1.
XX
PD 16-OCT-2003.
XX
PF 03-MAR-2003; 2003WO-US006656.
XX
PR 01-MAR-2003; 2002US-0360821P.
PR 15-JAN-2003; 2003US-0440201P.

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XX (BRAC ) BRACCO INT BV.
PA (DYAX-) DYAX CORP.
XX
XX Arbogast C, Bussat P, Dransfield DT, Fan H, Linder K;
PI Marinelli ER, Nanjappan P, Nunn A, Pillai R, Pochon S, Ramalingam K;
PI Sato A, Shrivastava A, Song B, Swenson RE, Von Wronski MA;
PI Walker SM;
XX
XX WPI; 2004-053022/05.
DR
XX
XX New compound with two different binding groups for same target, useful as
PT diagnostic and therapeutic agent, e.g. for tumors and other angiogenic
PT diseases.
XX
XX Example 6; Page 119; 278pp; English.
PS
XX
XX The invention relates to a novel multivalent compound comprising two
CC binding groups specific for different binding sites on the same target.
CC The compound of the invention demonstrates cytostatic, antirheumatic,
CC antiarthritic, antipsoriatic, antidiabetic, ophthalmological,
CC antiarteriosclerotic, antitumor and vasotropic activities and may act as
CC an inhibitor of receptor tyrosine kinase activity. The compound may be
CC used to prepare diagnostic imaging agents and pharmaceutical compositions
CC for treating diseases associated with angiogenesis or hyperproliferation,
CC particularly tumours, but also rheumatoid arthritis, psoriasis, diabetic
CC retinopathy, atherosclerosis, ulcers and restenosis. Furthermore, the
CC compound may be utilised as a contraceptive via inhibition of uterine
CC neovascularisation. The current sequence is that of the RT-PCR primer
CC oligo dt of the invention which was used to amplify KDR (kinase domain
CC region)-related RNA.
XX
XX Sequence 27 BP; 0 A; 1 C; 1 G; 25 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 25; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 250
ADR51048/c
ID ADR51048 standard; DNA; 27 BP.
XX
AC ADR51048;
XX
XX 21-OCT-2004 (first entry)
DT
XX
XX Duo binding moiety multivalent compound associated primer #1.
DE
XX
XX ss; primer; antiarthritic; cytostatic; ophthalmological;
KW angiogenesis inhibitor; Kdr tyrosine kinase inhibitor; VEGF antagonist;
KW hepatocyte growth factor antagonist; multivalent compound;
KW binding moiety; euplastic tumour growth; angiogenesis;
KW hyperproliferation; arthritis; atherosclerotic plaque;
KW corneal graft neovascularization; ocular disease.
XX
XX Synthetic.
OS
XX
XX WO2004064595-A2.
PN
XX
XX 05-AUG-2004.
PD
XX
XX 11-SEP-2003; 2003WO-US028838.
PF
XX
XX 15-JAN-2003; 2003US-0440201P.
PR
XX
XX 03-MAR-2003; 2003US-00379287.
PR
XX
XX (BRAC ) BRACCO INT BV.
PA (DYAX-) DYAX CORP.

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XX Arbogast C, Bussat P, Dransfield DT, Fan H, Linder K;
PI Marinelli ER, Nanjappan P, Nunn A, Pillai R, Pochon S, Ramalingam K;
PI Sato A, Shrivastava A, Song B, Swenson RE, Von Wronski MA;
PI Walker SM;
XX
XX WPI; 2004-593275/57.
DR
XX
XX Multivalent compounds with at least two binding moieties having
PT specificity for different binding sites on the same target, useful for
PT treating and diagnosing, e.g. angiogenic and hyperproliferative
PT disorders.
XX
XX Example 6; SEQ ID NO 72; 320pp; English.
PS
XX
XX The invention relates to a multivalent compound (C) comprising at least
CC two binding moieties having specificity for different binding sites on
CC the same target. (C) is useful for treating euplastic tumour growth and
CC disease associated with angiogenesis or hyperproliferation (claimed). (C)
CC is useful for treating diseases such as arthritis, atherosclerotic
CC plaques, corneal graft neovascularization or ocular diseases. (C) is
CC small and can more easily reach a target. (C) localizes more effectively
CC to the target site than other targeting compounds due to its binding to
CC more than one site on the same target. This sequence represents a DNA
CC oligonucleotide used in the invention.
XX
XX Sequence 27 BP; 0 A; 1 C; 1 G; 25 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 25; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 3.8e+02;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 251
ABN83378
ID ABN83378 standard; DNA; 29 BP.
XX
AC ABN83378;
XX
XX 15-AUG-2002 (first entry)
DT
XX
XX Mononucleotide repeat locus BAT25 probe #1.
DE
XX
XX Mononucleotide repeat locus; human; BAT25; probe; microsatellite; tumour;
KW ss.
KW
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
PH modified_base 29
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Labelled with Fluorescein"
XX
XX EP1207210-A1.
PN
XX
XX 22-MAY-2002.
PD
XX
XX 13-NOV-2001; 2001EP-00126930.
PF
XX
XX 15-NOV-2000; 2000EP-00124897.
PR
XX
XX (HOFF ) ROCHE DIAGNOSTICS GMBH.
PA (HOFF ) HOFFMANN LA ROCHE & CO AG F.
XX
XX Dietmaier W;
XX
XX WPI; 2002-437469/47.
XX
XX

```

PT Analyzing repeat sequences in DNA using a probe which hybridizes to
PT adjacent repetitive and non-repetitive regions and determining hybrid
PT melting point is useful to detect microsatellite instability such as in
PT hereditary cancer.
XX PS
XX Claim 16; Page 7; 19pp; English.
XX
CC The present invention relates to a method for analysing a target nucleic
CC acid consisting of repetitive and non-repetitive sequences. The method
CC comprises hybridising a polynucleotide probe comprising a segment
CC complementary to a non-repetitive region and a segment complementary to
CC an adjacent repetitive region, where the second segment consists of a
CC defined number of repeats, and determining the melting point temperature
CC of the hybrid. The method is used to analyse microsatellites, especially
CC microsatellite instability, particularly as a means for detecting
CC hereditary tumours. Alternatively, the method is used to identify an
CC individual in a population. The present sequence is a probe for
CC Mononucleotide repeat locus BAT55, and was used to illustrate the
CC invention
XX
XX Sequence 29 BP; 26 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 25; DB 1; Length 29;
XX Best Local Similarity 100.0%; Pred. No. 4e+02;
XX Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733
XX |||||
XX Db 2 AAAAAAAAAAAAAAAAAAAAAAAAAA 26
XX
XX RESULT 252
XX ADO81068/c
XX ID ADO81068 standard; DNA; 28 BP.
XX
XX AC ADO81068;
XX
XX DT 29-JUL-2004 (first entry)
XX
XX DE Cow prion protein microsatellite locus primer #80.
XX
XX gene typing; polymorphic microsatellite loci; PMU;
XX disease predisposition; microsatellite marker; prion disease;
XX cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
XX milk protein; hormone; transcription factor; pT7-blue-vector; cow;
XX microsatellite; PCR; primer; ss.
XX
XX OS Bos taurus.
XX
XX FN DE10236711-A1.
XX
XX PD 26-FEB-2004.
XX
XX PF 09-AUG-2002; 2002DE-01036711.
XX
XX PR 09-AUG-2002; 2002DE-01036711.
XX
XX PA (UVHO-) UNIV HOHENHEIM.
XX
XX PI Geldermann H, Preuss S, Han Y;
XX
XX PR WPI; 2004-215730/21.
XX
XX Typing genes that contain polymorphic microsatellite loci, useful for
XX identifying predisposition to disease, by amplification and determining
XX length of amplicons.
XX
XX Example 3; Page 28; 64pp; German.
XX
XX The invention describes a method of typing (M1) a gene (I) that has one
XX or more polymorphic microsatellite loci (PML). The method comprises: PCR
XX amplification of at least one DNA region of (I) that includes PML, using
XX as template a DNA sample containing at least one segment of (I); and

CC determining the length of the resulting amplicon(s). Also described are:
CC a method of determining (M2) microsatellite markers (MM) for
CC predisposition to a disease, associated with a gene that includes one or
CC more PML; and prediagnosis (M3) of diseases associated with gene that
CC include PML. The method is used to identify microsatellite markers, in a
CC disease-related gene, that are associated with a predisposition to
CC diseases and for prediagnosis of such diseases, especially prion diseases
CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
CC metabolic diseases; also to type genes that encode milk proteins
CC hormones or transcription factors. The method is simpler, quicker and
CC particularly less expensive than known methods based on sequencing. This
CC sequence represents a primer used to genotype a region of the cow prion
CC protein (PrP) comprising a polymorphic microsatellite locus.
XX
XX Sequence 28 BP; 0 A; 2 C; 0 G; 26 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24.8; DB 1; Length 28;
XX Best Local Similarity 92.9%; Pred. No. 4e+02;
XX Matches 26; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2736
XX |||||
XX Db 28 AAAAAAAAAAAAAAAAAAGAGAAAAA 1
XX
XX RESULT 253
XX ADO30495/c
XX ID ADO30495 standard; DNA; 26 BP.
XX
XX AC ADO30495;
XX
XX DT 29-JUL-2004 (first entry)
XX
XX DE 5' RACE PCR primer, SEQ ID NO:1598.
XX
XX G protein-coupled receptor; GPCR; drug screening; diagnosis;
XX transgenic mouse; neurological disorder; adrenal gland disorder;
XX colon disorder; intestinal disorder; cardiovascular disorder;
XX muscular disorder; blood disorder; immune disorder; bone disorder;
XX joint disorder; metabolic disorder; nutritive disorder; cancer;
XX kidney disorder; liver disorder; lung disorder; breast disorder;
XX ovary disorder; uterus disorder; prostate disorder; testis disorder;
XX skin disorder; stomach disorder; pancreas disorder; spleen disorder;
XX thymus disorder; thyroid disorder; antiparkinsonian; antianemic;
XX cytostatic; antiinflammatory; vasotropic; antianginal; antiarrhythmic;
XX CNS; central nervous system; respiratory; antidiarrhoeic; antidiabetic;
XX viricide; hepatotropic; antibacterial; antithyroid; anorectic;
XX dermatological; antiulcer; antitumor; gene therapy; GPCR modulator;
XX immunosuppressive; nephrotropic; RACE PCR; primer; ss.
XX
XX OS Synthetic.
XX
XX FN WO2004040000-A2.
XX
XX PD 13-MAY-2004.
XX
XX PF 09-SEP-2003; 2003WO-US028226.
XX
XX PR 09-SEP-2003; 2002US-0409303P.
XX
XX PR 09-APR-2003; 2003US-0461329P.
XX
XX PA (PRIM-) PRIMAL INC.
XX
XX PI Gaitanaris GA, Bergmann JE, Gragerov A, Hohmann J, Li F;
XX Madisen L, Mcilwain KL, Pavlova MN, Vassilatis D, Zeng H;
XX
XX PR WPI; 2004-390329/36.
XX
XX Novel mammalian G protein coupled receptors, useful for identifying
XX compounds that modulates diagnosing and treating disease condition
XX associated with GPCR dysfunction e.g. autoimmune diseases, angina
XX pectoris, Parkinson's disease.

XX Disclosure; SEQ ID NO 1598; 542pp; English.

PS The invention relates to human and mouse G protein-coupled receptors

XX (GPCRs) and nucleic acids encoding them. The invention also relates to

CC sequences at least 90% identical to the GPCR proteins and nucleic acids

CC of the invention; methods of treating, preventing or diagnosing diseases

CC associated with GPCRs of the invention; methods of screening for

CC compounds useful in the treatment of GPCR-related diseases; a transgenic

CC mouse comprising a GPCR gene of the invention; a mouse comprising a

CC mutation in a GPCR transgene or in an endogenous GPCR gene; cells derived

CC from the transgenic mice; kits comprising several mice, each of which has

CC a mutation in a different GPCR gene of the invention; and kits comprising

CC probes which hybridise to GPCR polynucleotides of the invention. The

CC invention further discloses variants of the GPCR polypeptides and vectors

CC comprising a GPCR nucleic acid. The GPCR nucleic acids and proteins may

CC be used in the diagnosis, treatment or prevention of a wide variety of

CC diseases including neurological disorders (e.g., Alzheimer's disease,

CC depression, diabetic neuropathy, Parkinson's disease or schizophrenia);

CC disorders of the adrenal gland; disorders of the colon or intestine

CC (e.g., Crohn's disease, diarrhoea, food poisoning or irritable bowel

CC syndrome); cardiovascular disorders (e.g., angina, cardiac arrhythmia or

CC myocardial infarction); muscular disorders; blood disorders (e.g.,

CC anaemia or leukaemia); immune disorders (e.g., autoimmune disorders or

CC AIDS); bone and joint disorders (e.g., osteoarthritis, rheumatoid

CC arthritis, gout or osteoporosis); metabolic or nutritive deficiency-related

CC diseases; and disorders of the kidney, liver, lung, breast, ovary,

CC uterus, prostate, testis, skin, stomach, pancreas, spleen, thymus and

CC thyroid (e.g., cancers). The present sequence represents a RACE (rapid

CC amplification of cDNA ends) PCR primer used in the isolation of cDNA

CC encoding human GPCRs. Note: The full sequence data for this patent did

CC not form part of the printed specification; those sequences not shown

CC were obtained in electronic format directly from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences.

XX

SQ Sequence 26 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 2 Other;

Query Match 0.9%; Score 24.2; DB 1; Length 26;

Best Local Similarity 96.0%; Pred. No. 4.2e+02;

Matches 24; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAAAAAA 2732

Db :|||||

25 BAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 254

AAT99286

ID AAT99286 standard; DNA; 24 BP.

XX

AC AAT99286;

XX

DT 15-APR-1998 (first entry)

XX

DE POLYA, a competitor oligonucleotide for binding human PUR-alpha.

XX

KW PUR element; human; c-myc; inhibitor; hyperproliferative disease; ss;

XX cancer; probe; hybridisation.

XX

OS Synthetic.

OS Homo sapiens.

XX

XX US5672479-A.

XX

PD 30-SEP-1997.

XX

XX 07-JUN-1995; 95US-00486421.

XX

XX 28-AUG-1992; 92US-00938189.

PR

PR 02-FEB-1993; 93US-00014943.

PR

PR 06-JUN-1995; 95US-00470911.

XX

PA (MOUN) MOUNT SINAI SCHOOL MEDICINE.

XX

PI Bergemann AD, Johnson EM;

XX

DR WPI; 1997-488859/45.

XX

XX Assays for PUR protein ligands or modulators - using immobilised PUR

PT protein or fragments, to treat hyper-proliferative diseases, e.g. cancer.

XX

XX Example; Col 33; 64pp; English.

PS

XX The oligonucleotides AAT99279-T99286 were used as competitor

CC oligonucleotides for the binding of PUR protein to DNA. The PUR sequence

CC can be used to identify chemical or biological compounds that bind to PUR

CC or binding fragments of PUR. Inhibitors of PUR activity may be used to

CC treat hyperproliferative diseases such as cancer

XX

SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;

Best Local Similarity 100.0%; Pred. No. 4.2e+02;

Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2732

Db :|||||

1 AAAAAAAAAAAAAAAAAAAAAAAAAA 24

RESULT 255

AAV31743

ID AAV31743 standard; DNA; 24 BP.

XX

AC AAV31743;

XX

DT 24-SEP-1998 (first entry)

XX

DE Nucleotide sequence of the oligonucleotide POLYA.

XX

KW PUR-alpha gene; inhibition; viral infection; cancer; PUR element;

XX hyperproliferative disease; ss.

XX

OS Synthetic.

XX

PN US5756684-A.

XX

PD 26-MAY-1998.

XX

PF 06-JUN-1995; 95US-00470911.

XX

XX 28-AUG-1992; 92US-00938189.

PR

PR 02-FEB-1993; 93US-00014943.

XX

XX (MOUN) MOUNT SINAI SCHOOL MEDICINE.

XX

PI Bergemann AD, Johnson EM;

XX

DR WPI; 1998-321632/28.

XX

XX PUR protein and its fragments - that inhibit PUR protein binding to PUR

PT element or other proteins.

XX

XX Example 7.1.1; Col 33; 63pp; English.

XX

CC This is the nucleotide sequence of an oligonucleotide used as a

CC competitor with the PUR element in the method of the invention, involving

CC the use of the PUR protein and its fragments, which inhibit PUR protein

CC binding to PUR element or other proteins. Inhibitors of PUR activity may

CC be useful for treating viral infections and hyperproliferative diseases

CC such as cancer

XX

SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;

```

Best Local Similarity 100.0%; Pred. No. 4.2e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 24; Conservative 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
DB 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 24

RESULT 256
AAAX04086
ID AAX04086 standard; DNA; 24 BP.
AC AAX04086;
XX
DT 12-APR-1999 (first entry)
DE Oligonucleotide POLYA used in PUR cloning and sequencing.
KW PUR element; PUR-alpha; hyperproliferative disease; cancer; human;
KW monoclonal antibody; identification; characterisation; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US5869622-A.
XX
PD 09-FEB-1999.
XX
PF 07-JUN-1995; 95US-00486809.
XX
PR 28-AUG-1992; 92US-00938189.
PR 02-FEB-1993; 93US-00014943.
PR 06-JUN-1995; 95US-00470911.
XX
PA (MOUN ) MOUNT SINAI SCHOOL MEDICINE.
XX
PI Bergemann AD, Johnson EM;
XX
DR WPI; 1999-152881/13.
XX
XX Monoclonal antibody specific for PUR protein - useful for treating
PT cancer.
XX
PS Example; Col 33; 64pp; English.
XX
CC The present invention describes a monoclonal antibody that specifically
CC binds to an epitope of the PUR protein. Antibodies that bind to the PUR
CC protein and neutralise PUR activity may be used to treat
CC hyperproliferative diseases such as cancer. PUR antibodies may be used
CC diagnostically to detect aberrant expression of the PUR protein and/or
CC mutations in the PUR gene. The present sequence represents an
CC oligonucleotide used in the cloning and sequencing of the PUR protein and
CC its sequence element PUR repeat, in an example from the present invention
XX
SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
DB 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 24

RESULT 257
AAA40359/c
ID AAA40359 standard; RNA; 24 BP.
XX
AC AAA40359;
XX
DT 10-NOV-2000 (first entry)
XX

```

```

DE pBluescriptSK+ phagemid primer SEQ ID NO: 9.
XX Primer; cloning; ligation; ss.
XX Synthetic.
XX WO200036088-A1.
XX
PD 22-JUN-2000.
XX
PF 17-DEC-1999; 99WO-US030277.
XX
PR 17-DEC-1998; 98US-00213834.
XX
PA (ROMA/) ROMANTCHIKOV Y.
XX
PI Romantchikov Y;
XX
DR WPI; 2000-442381/38.
XX
CC Inserting a nucleic acid into a circular vector comprising joining their
CC ends, melting, and reannealing ends at two different concentrations,
CC useful for cloning small amounts of nucleic acids and forming genomic
CC libraries.
XX
PS Example 3; Page 67; 71pp; English.
XX
CC This invention describes a novel method (M1) for inserting a nucleic acid
CC (N1) into a circular vector (V1) comprising joining ends of N1 and V1
CC under a first nucleic acid concentration, melting hybridized cohesive
CC circularization ends, and reannealing the ends at a second concentration.
CC The methods are useful for the cloning small amounts of nucleic acids and
CC forming genomic libraries of complex populations of DNA or cDNA. The
CC methods allow the cloning of minute amounts of nucleic acids efficiently
CC and avoids the size selection problems of prior art systems. Larger
CC nucleic acid fragments are just as easily cloned, allowing highly
CC representative libraries to be made. Vector to vector ligation is avoided
CC using the methods. AAA40351-A40366 represents primers used to illustrate
CC the method of the invention
XX
SQ Sequence 24 BP; 0 A; 0 C; 0 G; 16 T; 8 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
DB 24 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 258
AAA40353/c
ID AAA40353 standard; DNA; 24 BP.
XX
AC AAA40353;
XX
DT 10-NOV-2000 (first entry)
XX
DE pBluescriptSK+ phagemid primer SEQ ID NO: 3.
XX
KW Primer; cloning; ligation; ss.
XX
OS Synthetic.
XX
PN WO200036088-A1.
XX
PD 22-JUN-2000.
XX
PF 17-DEC-1999; 99WO-US030277.
XX
PR 17-DEC-1998; 98US-00213834.
XX

```

(ROMA/) ROMANTCHIKOV Y.

Romantchikov Y;
WPI; 2000-442381/38.

Inserting a nucleic acid into a circular vector comprising joining their ends, melting, and reannealing ends at two different concentrations, useful for cloning small amounts of nucleic acids and forming genomic libraries.

Example 1; Page 66; 71pp; English.

This invention describes a novel method (M1) for inserting a nucleic acid (N1) into a circular vector (V1) comprising joining ends of N1 and V1 under a first nucleic acid concentration, melting hybridized cohesive circularization ends, and reannealing the ends at a second concentration. The methods are useful for the cloning small amounts of nucleic acids and forming genomic libraries of complex populations of DNA or cDNA. The methods allow the cloning of minute amounts of nucleic acids efficiently and avoids the size selection problems of prior art systems. Larger nucleic acid fragments are just as easily cloned, allowing highly representative libraries to be made. Vector to vector ligation is avoided using the methods. AAA40351-A40366 represents primers used to illustrate the method of the invention

Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
|||||
DB 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 259
AAF99756/c

ID ID AAF99756 standard; DNA; 24 BP.
XX XX
AC AAF99756;
XX XX
DT 12-JUN-2001 (first entry)
XX XX
DE Immunostimulatory nucleic acid #872.
XX XX
KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX XX
OS Synthetic.
XX XX
PN WO200122972-A2.
XX XX
PD 05-APR-2001.
XX XX
PF 25-SEP-2000; 2000WO-US026383.
XX XX
PR 25-SEP-1999; 99US-0156113P.
PR 27-SEP-1999; 99US-0156135P.
PR 23-AUG-2000; 2000US-0227436P.
XX XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (COLE-) COLEY PHARM GMBH.
XX XX
PI Krieg AM, Schetter C, Vollmer J;
XX XX
DR WPI; 2001-273485/28.
XX XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
PT using immunostimulatory Py-rich and TG nucleic acids.

CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the
 CC present sequence may have a phosphorothioate backbone
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
 |||||
 Db 24 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 261

AAF99757
 ID AAF99757 standard; DNA; 24 BP.

AC AAF99757;

DT 12-JUN-2001 (first entry)

DE Immunostimulatory nucleic acid #873.

XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
 XX Synthetic.

XX WO200122972-A2.

XX 05-APR-2001.

XX 25-SEP-2000; 2000WO-US026383.

XX 25-SEP-1999; 99US-0156113P.

XX 27-SEP-1999; 99US-0156135P.

XX 23-AUG-2000; 2000US-0227436P.

XX (IOWA) UNIV IOWA RES FOUND.

PA (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Schetter C, Vollmer J;

XX WPI; 2001-273485/28.

XX Vaccinating against tumors, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids.

XX Claim 101; Page 57; 338pp; English.

XX The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic
 CC acid to a non-rodent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
 CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the

CC present sequence may have a phosphorothioate backbone
 XX
 SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 24

RESULT 262

ABV14842/C
 ID ABV14842 standard; cDNA; 24 BP.

XX ABV14842;

XX 13-SEP-2002 (first entry)

XX Human prostate expression marker cDNA 14833.

XX Human; prostate cancer; cytostatic; carcinogen; pharmacodynamic marker;
 KW pharmacogenomic marker; gene; ss.

XX Homo sapiens.

XX WO200160860-A2.

XX 23-AUG-2001.

XX 20-FEB-2001; 2001WO-US005171.

XX 17-FEB-2000; 2000US-0183319P.

XX 16-MAR-2000; 2000US-0189862P.

XX 25-MAY-2000; 2000US-0207454P.

XX 09-JUN-2000; 2000US-0211314P.

XX 18-JUL-2000; 2000US-0219007P.

XX 13-DEC-2000; 2000US-025281P.

XX (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.

XX Schlegel R, Endege WO, Monahan JB;

XX WPI; 2001-662795/76.

XX Novel isolated nucleic acid molecule associated with cancerous state of
 PT prostate cells and correlating with presence of prostate cancer, useful
 PT for detecting presence of prostate cancer, stage of prostate cancer.

XX Claim 1; Page 2483; 11750pp; English.

XX The invention relates to an isolated nucleic acid molecule (I) comprising
 CC a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
 CC specification or its complement. (I) is useful for: (a) assessing whether
 CC a patient is afflicted with prostate cancer; (b) monitoring the
 CC progression of prostate cancer in a patient; (c) assessing the efficacy
 CC of a test compound to inhibit prostate cancer in a patient; (d) assessing
 CC the efficacy of a therapy for inhibiting prostate cancer in a patient;
 CC (e) selecting a composition for inhibiting prostate cancer in a patient;
 CC (f) assessing the prostate cell carcinogenic potential of a compound; (g)
 CC assessing whether prostate cancer has metastasized in a patient; (h)
 CC determining the aggressiveness or indolence of prostate cancer in a patient
 CC ; (I) is also useful as a pharmacodynamic or pharmacogenomic marker

XX Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732


```

Db      24  AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
|||||
RESULT 263
ABS78477/c
ID  ABS78477 standard; DNA; 24 BP.
XX
AC  ABS78477;
XX
DT  13-DEC-2002 (first entry)
XX
DE  Angiogenesis inhibitory oligonucleotide #961.
XX
KW  Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW  tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW  diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW  corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW  rubeosis; Osler-Weber Syndrome; myocardial angiogenesis;
KW  plaque neovascularisation; telangiectasia; haemophilic joint;
KW  angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW  scleroderma; hypertrophic scar.
XX
OS  Synthetic.
XX
PN  WO200253141-A2.
XX
PD  11-JUL-2002.
XX
PF  14-DEC-2001; 2001WO-US048458.
XX
PR  14-DEC-2000; 2000US-0255534P.
XX
PA  (COLE-) COLEY PHARM GROUP INC.
XX
PI  Bratzler RL;
XX
DR  WPI; 2002-566690/60.
XX
PT  Inhibiting angiogenesis in a subject, involves administering at least one
PT  antiangiogenic nucleic acid molecule to the subject.
XX
PS  Claim 2; Page 36; 276pp; English.
XX
CC  The invention relates to inhibiting angiogenesis in a subject, comprising
CC  administering at least one antiangiogenic nucleic acid molecule. Also
CC  included is a kit comprising a first container housing the antiangiogenic
CC  nucleic acids, and instructions for administering them to a subject
CC  having a condition characterised by unwanted angiogenesis. The method is
CC  useful for inhibiting angiogenesis associated with solid tumour growth,
CC  tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC  diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC  corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC  rubeosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque
CC  neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
CC  wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC  hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC  acid of the invention
XX
SQ  Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match      0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
Db      24  AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
|||||
RESULT 264
ABS77949/c
ID  ABS77949 standard; DNA; 24 BP.
XX

```

```

XX  ABS77949;
XX
DT  13-DEC-2002 (first entry)
XX
DE  Angiogenesis inhibitory oligonucleotide #433.
XX
KW  Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW  tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW  diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW  corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW  rubeosis; Osler-Weber Syndrome; myocardial angiogenesis;
KW  plaque neovascularisation; telangiectasia; haemophilic joint;
KW  angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW  scleroderma; hypertrophic scar.
XX
OS  Synthetic.
XX
PN  WO200253141-A2.
XX
PD  11-JUL-2002.
XX
PF  14-DEC-2001; 2001WO-US048458.
XX
PR  14-DEC-2000; 2000US-0255534P.
XX
PA  (COLE-) COLEY PHARM GROUP INC.
XX
PI  Bratzler RL;
XX
DR  WPI; 2002-566690/60.
XX
PT  Inhibiting angiogenesis in a subject, involves administering at least one
PT  antiangiogenic nucleic acid molecule to the subject.
XX
PS  Claim 2; Page 27; 276pp; English.
XX
CC  The invention relates to inhibiting angiogenesis in a subject, comprising
CC  administering at least one antiangiogenic nucleic acid molecule. Also
CC  included is a kit comprising a first container housing the antiangiogenic
CC  nucleic acids, and instructions for administering them to a subject
CC  having a condition characterised by unwanted angiogenesis. The method is
CC  useful for inhibiting angiogenesis associated with solid tumour growth,
CC  tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC  diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC  corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC  rubeosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque
CC  neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
CC  wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC  hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC  acid of the invention
XX
SQ  Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match      0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
Db      24  AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1
|||||
RESULT 265
ABS78478
ID  ABS78478 standard; DNA; 24 BP.
XX
AC  ABS78478;
XX
DT  13-DEC-2002 (first entry)
XX
DE  Angiogenesis inhibitory oligonucleotide #962.
XX

```

KW Angiogenesis inhibitor; ss: angiogenesis; solid tumour growth;
 KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
 KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
 KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
 KW rubecosis; Ogler-Webber Syndrome; myocardial angiogenesis;
 KW plaque neovascularisation; telangiectasia; haemophilic joint;
 KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
 KW scleroderma; hypertrophic scar.
 XX
 OS Synthetic.
 XX
 XX WO200253141-A2.
 PN
 XX
 XX 11-JUL-2002.
 PD
 XX
 XX 14-DEC-2001; 2001WO-US048458.
 XX
 XX 14-DEC-2000; 2000US-0255534P.
 PR
 XX (COLE-) COLEY PHARM GROUP INC.
 PA
 XX Bratzler RL;
 PI
 XX
 XX WPI; 2002-566690/60.
 DR
 XX
 XX Inhibiting angiogenesis in a subject, involves administering at least one
 PT antiangiogenic nucleic acid molecule to the subject.
 PT
 XX
 XX Claim 2; Page 36; 276pp; English.
 XX
 CC The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubecosis, Ogler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma, and
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 XX Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 24
 RESULT 266
 ABL39405/C
 ID ABL39405 standard; DNA; 24 BP.
 XX
 XX ABL39405;
 AC
 XX
 XX 16-APR-2002 (first entry)
 DT
 XX
 XX Immunostimulatory nucleic acid SEQ ID NO: 841.
 DE
 XX
 XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
 KW angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
 KW
 XX
 XX Synthetic.
 OS
 XX
 XX Key Location/Qualifiers
 PH modified_base 1. .24
 FT

FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone"
 XX
 PN WO200137843-A2.
 XX
 XX 27-DEC-2001.
 PD
 XX
 XX 22-JUN-2001; 2001WO-US020154.
 PF
 XX
 XX 22-JUN-2000; 2000US-0213346P.
 PR
 XX (IOWA) UNIV IOWA RES FOUND.
 PA
 XX Weiner G, Hartmann G;
 PI
 XX WPI; 2002-154611/20.
 DR
 XX
 XX Treating or preventing cancer, such as basal cell carcinoma, comprises
 PT administering immunostimulatory nucleic acids that induce expression of
 PT cell surface antigens and antibodies to a subject having or at risk of
 PT developing cancer.
 PT
 XX
 XX Disclosure; Page 309; 312pp; English.
 PS
 XX
 CC The present invention relates to methods for treating or preventing
 CC cancer, involving administering to a subject having or at risk of
 CC developing cancer immunostimulatory nucleic acids that induce expression
 CC of cell surface antigens and antibodies. The methods are useful for
 CC treating or preventing cancer such as basal cell carcinoma, bladder
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 CC breast cancer, cervical cancer, colon and rectum cancer, connective
 CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 CC present sequence is an immunostimulatory oligonucleotide described in the
 CC exemplification of the invention
 XX
 XX Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 SQ
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 267
 ABA98840
 ID ABA98840 standard; DNA; 24 BP.
 XX
 XX ABA98840;
 AC
 XX
 XX 01-JUL-2002 (first entry)
 DT
 XX
 XX A24 oligonucleotide for the creation of Pc-A24.
 DE
 XX
 XX Component detection; clinical diagnosis; cell detection; drug detection;
 KW metabolite detection; pesticide detection; ligand detection; ss.
 KW
 XX
 XX Synthetic.
 OS
 XX
 XX Key Location/Qualifiers
 PH modified_base 24
 FT /*tag= a
 FT /label= OTHER
 FT /note= "modified by PO2OCH2CH2CH2SCH2SCH2CH2CH2OH"
 XX
 XX WO200184157-A2.
 PN

```

XX PD 08-NOV-2001.
XX PF 03-MAY-2001; 2001WO-US014528.
XX PR 04-MAY-2000; 2000US-00564230.
XX PA (DADE-) DADE BEHRING INC.
XX PI Pease JS, Cromer R, Patel R, Kurn N, De Keczser S;
XX DR WPI; 2002-164078/21.
XX PT Detection of multiple analytes, e.g. ligands, receptors, polynucleotides
XX FT and pollutants, involves adding a combination of sensitizer reagents and
XX PT reactive reagent Actuable by a product of the sensitizer reagents.
XX PS Example; Page 58; 87pp; English.
XX CC The invention relates to the detection of multiple components in a
XX CC medium, comprising combining the medium with at least two sensitizer
XX CC reagents, and at least one reactive reagent activated by a product
XX CC generated by the sensitizer reagents when activated; and differentially
XX CC activating the sensitizer reagents. The combination of sensitizer
XX CC reagents and reactive reagent(s) allows differential detection of the
XX CC components. Methods of the invention may be used for the detection of
XX CC ligands, receptors and polynucleotides, and also for the detection of
XX CC e.g. cells, various drugs, metabolites, pesticides (e.g. polyhalogenated
XX CC biphenyls, phosphate esters, thiophosphates, carbamates and
XX CC polyhalogenated sulfenamides) and pollutants. Methods of the invention
XX CC allow the detection of multiple analytes in a single test medium. An
XX CC application of the methods of the present invention would be in the field
XX CC of clinical diagnostics. The current sequence represents A24
XX CC oligonucleotide for the creation of oligonucleotide coated phthalocyanine
XX CC sensitizer particles (Pc-A24)
XX SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 1 AAAAAAAAAAAAAAAAAAAAAA 24

RESULT 268
AAS17869
ID AAS17869 standard; DNA; 24 BP.
XX AAS17869;
XX AC
XX DT 08-MAY-2002 (first entry)
XX DE A24 oligonucleotide used to create doptAR chemiluminescer particles.
XX KW Polymorphism detection; sequence detection; mutation detection; A24;
XX KW probe; non-dissociative termolecular complex; doptAR sensitizer particle;
XX KW single nucleotide polymorphism; SNP; ss.
XX OS Synthetic.
XX FH Key
XX FT modified_base 24 Location/Qualifiers
XX FT /*tag= a
XX FT /note= "A is covalently linked to a
XX FT PO2OCH2CH2CH2SCH2SCH2CH2OH moiety"
XX PN WO200190399-A2.
XX PD 29-NOV-2001.
XX XX

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PF 17-MAY-2001; 2001WO-US016089.
XX PR 19-MAY-2000; 2000US-00574596.
XX PA (DADE-) DADE BEHRING INC.
XX PI Patel RD;
XX DR WPI; 2002-097664/13.
XX PT Detecting presence of polynucleotide, differences between polynucleotide
XX FT sequences, useful for detecting single nucleotide polymorphism and
XX PT alleles of polynucleotide sequence involves use of three competitive
XX PS probes.
XX PS Example; Page 47; 75pp; English.
XX CC This invention represents a method for detecting the presence of a
XX CC polynucleotide sequence, differences in polynucleotide sequences or
XX CC mutations in genomic DNA. The method involves contacting 3
XX CC oligonucleotide probes with a sample containing a polynucleotide. The
XX CC first probe hybridises to a region of the polynucleotide sequence and the
XX CC second and third probes can bind a second region of the polynucleotide
XX CC sequence. The second and third probes are identical except for the
XX CC presence or difference of one or more nucleotides. The reaction medium is
XX CC then subjected to conditions for forming substantially non-dissociative
XX CC termolecular complexes, which can be at least one of, the polynucleotide
XX CC sequence with the first and second probes or the polynucleotide sequence
XX CC with the first and third probes. The oligonucleotide probes have labels
XX CC non-covalently bound to allow for their detection upon binding. The
XX CC method of the invention is useful for detecting the presence of a single
XX CC nucleotide polymorphism (SNP) in a fragment of genomic DNA. The method
XX CC can be used for the direct detection of nucleic acid in very small
XX CC quantities without amplification. In addition, the method may be carried
XX CC out with amplification of the target and reference sequences. This
XX CC sequence represents an oligonucleotide probe A24 used to create doptAR
XX CC chemiluminescer sensitizer particles in the method of the invention.
XX CC Binding the nucleic acid to a suspendable particle acts as a support and
XX CC provides a means of segregating the bound polynucleotide target from the
XX CC bulk solution
XX SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 1 AAAAAAAAAAAAAAAAAAAAAA 24

RESULT 269
ABK15639/C
ID ABK15639 standard; DNA; 24 BP.
XX ABK15639;
XX AC
XX DT 08-MAY-2002 (first entry)
XX DE RNA-PCR procedure primer poly(dT)24.
XX KW RNA-PCR; primer; ss; poly(dT)24; cytostatic; antibacterial; gene therapy;
XX KW mRNA-CDNA hybrid; gene function inhibition; cancer; PTCs; antisense;
XX KW high throughput screening; D-RNAi; DNA-RNA interference; RdRP;
XX KW RNA dependent RNA polymerase; posttranscriptional gene silencing.
XX OS Synthetic.
XX PN WO200210374-A2.
XX PD 07-FEB-2002.
XX XX

```

PF 02-AUG-2001; 2001WO-US024412.
 XX
 PR 02-AUG-2000; 2000US-0222479P.
 XX
 PA (UYSC-) UNIV SOUTHERN CALIFORNIA.
 XX
 PI Lin S, Chuong C, Widelitz RB;
 XX
 XX WPI; 2002-188740/24.
 DR
 XX
 XX Generating mRNA-cDNA hybrids for suppressing cancer-related genes, or
 XX treating or preventing microbe related genes, comprises thermocycling
 XX steps of promoter-linked double-stranded cDNA or RNA synthesis.
 XX
 PS Example 5; Page 26; 53pp; English.
 XX
 CC The invention relates to generating mRNA-cDNA hybrids, comprising (a)
 CC providing a solution containing a nucleic acid template, one or more
 CC primers complementary to the sense conformation of the nucleic acid
 CC template, and one or more promoter-linked primers complementary to the
 CC antisense conformation of the nucleic acid template, and with an RNA
 CC promoter, (b) treating the nucleic acid template with the one of more
 CC primers to synthesise a first cDNA strand, (c) treating the first cDNA
 CC strand with one or more promoter-linked primers to synthesise a promoter-
 CC linked double-stranded nucleic acid, (d) treating the promoter-linked
 CC double-stranded nucleic acid to synthesise amplified mRNA fragments, and
 CC (e) treating the mRNA fragments with one or more primers to synthesise
 CC mRNA-cDNA hybrids by reverse transcription of the amplified mRNA
 CC fragments. The method is useful for preparing high amounts of pure and
 CC specific mRNA-cDNA hybrids for transducing biological effects of interest
 CC in vitro as well as in vivo for inhibiting gene function in prokaryotes
 CC and eukaryotes in vivo and in vitro, for suppressing cancer-related
 CC genes, in treating or preventing microbe related genes, in studying
 CC candidate molecular pathways with systematic knock out of involved
 CC molecules, in high throughput screening of gene functions based on
 CC microarray analysis, and as a tool in studying gene function in
 CC physiological conditions. The mRNA-cDNA hybrids may be used to screen for
 CC special gene functions, for manipulating gene expression in vitro, and
 CC for designing therapy for genetic diseases in vivo. The cDNA part of a D-
 CC RNAi (DNA-RNA interference) can be modified by nucleotide analogue
 CC incorporation to increase the stability and effectiveness of transfected
 CC probe activities. The RdRp (RNA dependent RNA polymerase) enzyme may
 CC provide higher affinity of the mRNA template of a D-RNAi compared to ds-
 CC RNA due to lower binding interaction between DNA-RNA duplexes than RNA-
 CC RNA duplexes. The cDNA part of a D-RNAi provides further antisense gene
 CC knockout activity in addition to the posttranscriptional gene silencing
 CC (PTGS) mechanisms of the sense-RNA template, resulting in multiple
 CC specific gene interference effects with one probe. The present sequence
 CC is a poly(dT) PCR primer used in conjunction with oligo(dC)10N primers to
 CC reverse transcribe mRNA into first strand cDNA in the method of the
 CC invention
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 270
 ID ABZ80181/c
 XX ABZ80181 standard; DNA; 24 BP.
 XX
 AC ABZ80181;
 XX
 XX 23-MAY-2003 (first entry)
 DT
 XX Immunostimulatory oligonucleotide SEQ ID NO:53.
 DE
 XX

KW Immunostimulation; immune response; natural killer cell; interferon;
 KW type 1 interferon; IFN; cancer; infectious disease; allergic disorder;
 KW immune related disorder; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1..24
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "optionally phosphorothioate backbone"
 XX
 XX WO2003015711-A2.
 XX
 XX 27-FEB-2003.
 XX
 XX 19-AUG-2002; 2002WO-US026468.
 XX
 XX 17-AUG-2001; 2001US-0313273P.
 PR
 PR 03-JUL-2002; 2002US-0393952P.
 XX
 XX (COLE-) COLEY PHARM GROUP INC.
 PA (COLE-) COLEY PHARM GMBH.
 PA (IOWA) UNIV IOWA RES FOUND.
 XX
 XX Krieg AM, Vollmer J, Uhlman E;
 PI
 XX WPI; 2003-268241/26.
 DR
 XX New immunostimulatory nucleic acid, useful for preparing a composition
 XX for treating an allergic condition.
 PT
 PT Example 1; Page 44; 115pp; English.
 XX
 CC The present invention describes immunostimulatory nucleic acids of 14-100
 CC nucleotides in length comprising the formula 5' XDCGHX2 3' (I), where X1
 CC or X2 = independently any sequence 0-10 nucleotides; D = nucleotide other
 CC than C; C = cytosine; G = guanine; H = nucleotide other than G. The
 CC immunostimulatory nucleic acid further comprises a sequence consisting of
 CC P and N positioned immediately 5' to X1 or 3' to X2 and N is a B cell
 CC neutralising sequence, where N begins with a CGG trinucleotide and is at
 CC least 10 nucleotides long and P is GC-rich palindromic containing sequence
 CC at least 10 nucleotides long. Also described: (I) a pharmaceutical
 CC composition comprising the immunostimulatory nucleic acid and a carrier;
 CC and (2) treating an allergic condition. (I) has antiallergic activity and
 CC can be used in gene therapy. (I) can be used for preparing a composition
 CC for treating a variety of immune related disorders such as cancer,
 CC infectious diseases and allergic disorders. (I) also stimulates the
 CC activation of natural killer cells and the production of type 1
 CC interferon (IFN). The present sequence represents an immunostimulatory
 CC oligonucleotide, which is used in an example from the present invention
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 271
 ID ACAG2284/c
 XX ACAG2284 standard; DNA; 24 BP.
 XX
 AC ACAG2284;
 XX
 XX 12-AUG-2003 (first entry)
 DT
 XX Oligo (dT)24 RT-PCR primer.
 DE
 XX

ss: PCR; RT-PCR; primer; reverse transcriptase PCR; antisense therapy;
mRNA expression profile; promoter containing primer.

Synthetic.

US2003022318-A1.

30-JAN-2003.

07-SEP-2001; 2001US-00949305.

25-JAN-2000; 2000US-00494212.

(EPIC-) EPICLONE INC.

Lin S, Ying S;

WPI; 2003-479488/45.

Improved polymerase thermocycling reaction for nucleic acid
amplification, by thermal cycling of promoter-linked nucleic acid
template synthesis and in vitro transcriptional amplification of nucleic
acid sequences.

Example 7; Page 14; 28pp; English.

The invention relates to an improved polymerase thermocycling reaction
(M1) for linear amplification of nucleic acid sequences, involves
denaturing a number of nucleic acid templates (I), combining the
denatured (I) with a promoter-containing primer (P1), a primer (P2), a
number of deoxynucleotide triphosphates and ribonucleotide triphosphates,
a reverse transcription enzyme, a DNA-dependent DNA polymerase and RNA
polymerase, contacting P1 with (I) to generate a number of promoter-
containing templates, denaturing the promoter-containing templates,
contacting P2 with the denatured promoter-containing templates to
generate a number of promoter-containing double-stranded DNA templates,
where the double-stranded nucleic acid templates are flanked by P1 in one
end and P2 in the other end of the other orientation, transcribing the
promoter-containing double-stranded DNA templates to form a number of
amplified RNA sequences, including the primer region of the promoter-
containing double-stranded DNA templates, contacting the amplified RNA
sequences with P2 to form a number of cDNAs and a number of DNA-RNA
hybrid templates, and denaturing the DNA-RNA hybrid templates. The method
is useful for improved polymerase thermocycling reaction for linear
amplification of nucleic acid sequences, and thus for producing mRNA
expression profile of a cell by M1 to generate multiple copies of the
mRNA. M1 is also useful for determining aberrant protein production of
cells in a diseased state, by generating an expression profile by the
above method, of cells in both normal and diseased states, comparing the
expression profile of the cells in the normal and diseased states,
determining the differences in mRNA composition of the cell(s) in the
diseased state, isolating the mRNA sequences of cell(s) in the diseased
state that differ from mRNA in cell(s) in non-diseased state, amplifying
the isolated mRNA by M1, and determining aberrant protein function of the
protein coded for by the isolated mRNA. M1 is also useful for treating a
cell in a diseased state caused by aberrant protein production, by
determining protein expression of a cell in a diseased state, determining
the mRNA sequence for the aberrant proteins, synthesising an antisense
sequence of the mRNA, amplifying the antisense mRNA sequences by M1, and
delivering a pharmaceutically effective dosage of a composition
comprising the anti-sense mRNA and a compatible lipid based biological
carrier. M1 is also useful for predicting the efficacy of a proposed drug
targeted against an aberrant protein, by determining aberrant protein
production of cell in a diseased state by the above method, amplifying
the aberrant protein by M1 and using recombinant techniques to determine
the effect of proposed drug on the aberrant protein. M1 is also useful
for differential screening of tissue-specific gene expression at a
cellular level, for preparing labeled RNA/DNA probes for a gene chip
technology, and for determining the efficacy of a drug regimen against a
gene or its cDNAs. The present sequence is an Oligo (dT)24 RT-(reverse
transcriptase) PCR primer used to produce first strand cDNA in the method
of the invention

SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 272

ACD99729/c

ID ACD99729 standard; DNA; 24 BP.

XX

AC ACD99729;

DT 25-SEP-2003 (first entry)

DE Immunostimulatory nucleic acid #415.

XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.

XX Synthetic.

XX OS

XX US2003050268-A1.

XX 13-MAR-2003.

XX 29-MAR-2002; 2002US-00112653.

XX 29-MAR-2001; 2001US-0279642P.

XX (KRIE/) KRIEG A M.

XX (BERG/) BERG D J.

XX Krieg AM, Berg DJ;

XX WPI; 2003-521815/49.

XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
PT disease by administering an immunostimulatory nucleic acid.
XX Disclosure; Page 20; 229pp; English.

XX The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid

SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 273

ACH03285

ID ACH03285 standard; DNA; 24 BP.

XX

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AC ACH03285;
XX
DT 25-SEP-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #920.
XX
DE Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
OS Synthetic.
XX
XX US2003050268-A1.
PN
XX
PD 13-MAR-2003.
XX
XX 29-MAR-2002; 2002US-00112653.
XX
XX 29-MAR-2001; 2001US-0279642P.
XX
PA (KRIE/) KRIEG A M.
PA (BERG/) BERG D J.
XX
XX Krieg AM, Berg DJ;
XX
XX WPI; 2003-521815/49.
XX
XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
PT disease by administering an immunostimulatory nucleic acid.
XX
PS Disclosure; Page 34; 229pp; English.
XX
XX The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid
XX
XX Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 1 AAAAAAAAAAAAAAAAAAAAAA 24

RESULT 274
ACH03284/c
ID ACH03284 standard; DNA; 24 BP.
XX
AC ACH03284;
XX
DT 25-SEP-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #919.
XX
XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
OS Synthetic.
XX
XX US2003050268-A1.
PN
XX

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PD 13-MAR-2003.
XX
XX 29-MAR-2002; 2002US-00112653.
XX
XX 29-MAR-2001; 2001US-0279642P.
XX
XX (KRIE/) KRIEG A M.
XX (BERG/) BERG D J.
XX
XX Krieg AM, Berg DJ;
XX
XX WPI; 2003-521815/49.
XX
XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
PT disease by administering an immunostimulatory nucleic acid.
XX
XX Disclosure; Page 34; 229pp; English.
XX
XX The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid
XX
XX Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
SQ
Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 275
ADA66379
ID ADA66379 standard; mRNA; 24 BP.
XX
AC ADA66379;
XX
XX 20-NOV-2003 (first entry)
XX
DE mRNA poly A.
XX
KW ss; nucleic acid amplification; multiple step elimination;
KW varying reaction condition elimination; poly A tract.
XX
OS Unidentified.
XX
XX Key Location/Qualifiers
FT primer_bind 1..24
FT /*tag= a
FT /note= "Binds to nucleotides 42-19 of the 1st strand cDNA
FT synthesis primer"
XX
XX US6582938-B1.
PN
XX
XX 24-JUN-2003.
PD
XX
XX 11-MAY-2001; 2001US-00854317.
XX
XX 11-MAY-2001; 2001US-00854317.
XX
XX (AFFY-) AFFYMETRIX INC.
XX
XX Su X, Dong H, Ryder TB;
XX
XX WPI; 2003-656427/62.
XX

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AC ADB37259;
XX
XX DT 04-DEC-2003 (first entry)
XX
XX DE Immunostimulatory nucleic acid #873.
XX
XX KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX
XX OS Synthetic.
XX
XX PN US2003087848-A1.
XX
XX PD 08-MAY-2003.
XX
XX PF 02-FEB-2001; 2001US-00776479.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
XX PI Bratzler RL, Petersen DM, Fouron Y;
XX
XX DR WPI; 2003-657977/62.
XX
XX KW Treating and/or preventing allergy or asthma using an immunostimulatory
XX KW nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX PS Disclosure; Page 18; 221pp; English.
XX
XX CC The invention relates to a method of treating or preventing allergy or
XX CC asthma which comprises administering to a subject a poly-G nucleic acid
XX CC in an aerosol formulation. The methods and compositions of the present
XX CC invention are useful for diagnosing and/or treating asthma and allergy
XX CC especially in a hypo-responsive subject. The present sequence represents
XX CC an immunostimulatory nucleic acid of the invention.
XX
XX SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 1 AAAAAAAAAAAAAAAAAAAAAA 24

RESULT 279
ADD31867/c
ID ADD31867 standard; DNA; 24 BP.
XX
XX AC ADD31867;
XX
XX DT 15-JAN-2004 (first entry)
XX
XX DE Butterfly biliverdin binding protein BBP-BIX oligonucleotide SEQ ID:106.
XX
XX KW recombination product; synthetic gene technology; butterfly;
XX KW biliverdin binding protein; ss.
XX
XX OS Synthetic.
XX
XX PN WO2003064611-A2.
XX
XX PD 07-AUG-2003.
XX
XX PF 29-JAN-2003; 2003WO-US002612.
XX
XX PR 30-JAN-2002; 2002US-00062188.
XX

```

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PA (EGEA-) EGEA BIOSCIENCES INC.
XX
XX PI Evans GA;
XX
XX DR WPI; 2003-663477/62.
XX
XX PT Creating recombination products between two distinct nucleotide
XX PT sequences, useful in the field of synthetic gene technology, and in
XX PT assembling a library, or a population or a collection of polypeptide
XX PT variants.
XX
XX PS Example 3; SEQ ID NO 106; 132pp; English.
XX
XX CC The present invention describes a method for creating a collection of
XX CC recombination products between two nucleotide sequences. The method
XX CC comprises combining an initial set of oligonucleotides corresponding to a
XX CC first nucleotide sequence with a subsequent set of oligonucleotides
XX CC corresponding to a distinct nucleotide sequence and further combining the
XX CC initial and subsequent sets of combination oligonucleotides having a
XX CC sequence region corresponding to the initial nucleotide sequence and a
XX CC sequence region corresponding to the second oligonucleotide sequence.
XX CC Also described is a method of creating a collection of recombination
XX CC products between two genes. The methods and compositions of the present
XX CC invention are useful in the field of synthetic gene technology, and more
XX CC specifically, to generating a collection of recombination products
XX CC between distinct nucleotide sequences. They can also be used in
XX CC assembling a library, or a population or a collection of polypeptide
XX CC variants that correspond to single or multiple polynucleotide
XX CC recombination products. The present sequence is used in the
XX CC exemplification of the present invention.
XX
XX SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 280
ADE25524/c
ID ADE25524 standard; DNA; 24 BP.
XX
XX AC ADE25524;
XX
XX DT 29-JAN-2004 (first entry)
XX
XX DE Rolling circle amplification related probe control oigo POS1/2.
XX
XX KW RCA; rolling circle amplification; genotyping;
XX KW single-nucleotide polymorphism; single base extension; SBE;
XX KW immuno-hybridisation; probe; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT modified_base 24
XX FT /*tags a
XX FT /mod_base= OTHER
XX FT /note= "optional biotin label"
XX
XX PN WO2003066817-A2.
XX
XX PD 14-AUG-2003.
XX
XX PF 06-FEB-2003; 2003WO-US003533.
XX
XX PR 06-FEB-2002; 2002US-0355374P.
XX
XX PA (AMSH ) AMERSHAM BIOSCIENCES AB.

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XX PI Xia J;
 XX DR WPI; 2003-697450/66.
 XX PT Detecting nucleic acid targets, useful e.g. for diagnosing single
 XX PT nucleotide polymorphisms, by extension of capture probe complementary to
 XX PT open circle probe.
 XX PS Example 1; Fig 5; 66pp; English.
 XX CC The invention is directed to novel methods of amplifying and detecting
 XX CC DNA using rolling circle amplification (RCA). The invention relates to
 XX CC detecting a target sequence (I), which involves using a capture probe
 XX CC (CP) that is complementary to an open circle probe and includes a
 XX CC cleavage site. The method comprises: attaching a capture probe (CP) to a
 XX CC substrate, at both ends, where the CP includes one domain complementary
 XX CC to an OCP (open circle probe) and a second domain that contains a
 XX CC cleavage site (CS), to form a device; treating CP with (I) and OCP for
 XX CC form a hybridisation complex (HC); treating HC with a ligase so that OCP
 XX CC is circularised, forming a second complex (HC2); treating CP with a
 XX CC cleavage agent, to cut at CS, and adding an extension enzyme (EE) and
 XX CC nucleotide triphosphates (NTPs) to form an extended CP, which is
 XX CC detected. The method is used for detecting (I) that comprises two target
 XX CC domains (TD1, TD2) and (I) that comprises two adjacent target domains.
 XX CC The method is used for detection, genotyping and/or quantification of
 XX CC target sequences, for research, clinical use, quality control or field
 XX CC testing, particularly detection of single-nucleotide polymorphisms. The
 XX CC method permits a high level of multiplexing, and since it provides
 XX CC localized product detection, with linear kinetics, is sensitive enough
 XX CC for direct detection and quantitation of unmodified targets. The present
 XX CC sequence is that of a single base extension (SBE) probe used in SNP
 XX CC genotyping with RCA signal amplification to demonstrate the method of the
 XX CC invention.
 XX SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 281
 AAD62664/C
 ID AAD62664 standard; DNA; 24 BP.
 XX AC AAD62664;
 XX DT 12-FEB-2004 (first entry)
 XX DE Immunostimulatory T-rich oligonucleotide #2183.
 XX KW Antibody dependent cellular cytotoxicity; ADCC; immune response; wart;
 XX KW imidazoquinoline agent; asthma; allergy; infectious disease; cancer;
 XX KW cytostatic; antimicrobial; dermatological; virucide; ss.
 XX OS Unidentified.
 XX PS US2003139364-A1.
 XX PD 24-JUL-2003.
 XX PF 15-OCT-2002; 2002US-00872502.
 XX PR 12-OCT-2001; 2001US-0329208P.
 XX PA (IOWA) UNIV IOWA RES FOUND.
 XX PI Krieg AM, Schetter C, Bratzler RL, Vollmer J, Jurk M, Bauer S;

XX DR WPI; 2003-829705/77.
 XX PT Stimulating antibody dependent cellular cytotoxicity, modulating immune
 XX PT response and inducing antigen-specific immune response in subject by
 XX PT administering imidazoquinoline agents in conjunction with other agents.
 XX PS Disclosure; Page 11; Opp; English.
 XX CC The invention relates to methods for stimulating antibody dependent
 XX CC cellular cytotoxicity (ADCC), for modulating immune response and for
 XX CC inducing antigen-specific immune response which involve administering
 XX CC imidazoquinoline agents in conjunction with other agents. The method is
 XX CC useful for stimulating ADCC in a subject having a disorder chosen from
 XX CC asthma/allergy, infectious disease, cancer and warts. The present
 XX CC sequence is an immunostimulatory oligonucleotide used to illustrate the
 XX CC method of the invention
 XX SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
 Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 282
 ACAS9802/C
 ID ACAS9802 standard; DNA; 24 BP.
 XX AC ACAS9802;
 XX DT 10-JUN-2003 (first entry)
 XX DE Gastric ulcer treatment immunostimulatory nucleic acid #148.
 XX KW Gastric ulcer; ss; immunostimulant; equine gastric ulcer syndrome; EGUS;
 XX KW Helicobacter pylori.
 XX OS Synthetic.
 XX PN US2002198165-A1.
 XX PD 26-DEC-2002.
 XX PF 01-AUG-2001; 2001US-00920313.
 XX PR 01-AUG-2000; 2000US-0222248P.
 XX PA (BRAT/) BRATZLER R L.
 XX PA (PETE/) PETERSEN D M.
 XX PI Bratzler RL, Petersen DM;
 XX DR WPI; 2003-370798/35.
 XX PT Prevention or treatment of gastric ulcer involves administering nucleic
 XX PT acid.
 XX PS Disclosure; Page 14; 45pp; English.
 XX CC The invention relates to a method of prevention or treatment of gastric
 XX CC ulcer comprising administering a nucleic acid to a subject in need for
 XX CC treatment of gastric ulcer. A nucleic acid sample comprising
 XX CC oligonucleotide 2006 was administered to a mouse model by an oral route
 XX CC or a vehicle control. Colonisation of mice by Helicobacter pylori was
 XX CC assessed at time points from 1 day to 1 month after treatment. The
 XX CC ability of the nucleic acid to reduce H. pylori colonisation was
 XX CC assessed. The method is useful for preventing or treating a gastric ulcer
 XX CC on a subject e.g. human or non-human vertebrate animal including dog,

CC cat, horse (equine gastric ulcer syndrome, EGUS), cow, goat, sheep, pig,
 CC rabbit, turkey, chicken, primate, rat and mouse. The method effectively
 CC treats or prevents gastric ulcers. The present sequence represents an
 CC immunostimulatory nucleic acid for the treatment of gastric ulcers
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 283
 ADG75917/c
 ID ADG75917 standard; DNA; 24 BP.
 XX
 AC ADG75917;
 XX
 DT 11-MAR-2004 (first entry)
 XX
 DE Non-CpG DNA oligonucleotide IMT 053 SeqID 19.
 XX
 KW ss; CpG; immunostimulatory; non-palindromic; immune response;
 KW proliferation; differentiation; cytokine; antibody production; B-cell;
 KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
 KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
 KW renal cell carcinoma.
 XX
 OS Synthetic.
 XX
 PN WO2003101375-A2.
 XX
 PD 11-DEC-2003.
 XX
 PF 30-MAY-2003; 2003WO-EP005691.
 XX
 PR 30-MAY-2002; 2002CA-02388049.
 XX
 PA (IMMU-) IMMUNOTECH SA.
 XX
 PI Lopez RA;
 XX
 PS WPI; 2004-053333/05.
 XX
 PT New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 PT acid sequence motif, useful for inducing B-cell activation, treating,
 PT preventing or ameliorating immune system disorder or tumoral disease e.g.
 PT melanoma.
 XX
 PS Example 3; SEQ ID NO 19; 139pp; English.
 XX
 CC This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
 CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primate, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present
 CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoral disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is the non-CpG DNA oligo IMT
 CC 053, used in an exemplification of the invention.
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 284
 ADR48246
 ID ADR48246 standard; DNA; 24 BP.
 XX
 AC ADR48246;
 XX
 DT 18-NOV-2004 (first entry)
 XX
 DE Microarray synthesised oligonucleotide #10.
 XX
 KW ss; deposition unit misalignment; polymeric array synthesis;
 KW pulse jet misalignment; printhead misalignment; microarray.
 XX
 OS Synthetic.
 XX
 PN US2004170984-A1.
 XX
 PD 02-SEP-2004.
 XX
 PF 25-FEB-2003; 2003US-00374307.
 XX
 PR 25-FEB-2003; 2003US-00374307.
 XX
 PA (LEPR/) LEPROUST B M.
 PA (AMOR/) AMORESE D A.
 PA (KRON/) KRONICK M N.
 XX
 PI Leproust EM, Amorese DA, Kronick MN;
 XX
 PS WPI; 2004-634540/61.
 XX
 PT Detection of deposition unit misalignment of in situ polymeric array
 PT synthesis device, by contacting test probe feature with different
 PT distinguishably labeled targets, and evaluating binding of labeled
 PT targets to test probe feature.
 XX
 PS Example 2; Page 16; 36pp; English.
 XX
 CC The invention relates to a method of detection of deposition unit
 CC misalignment of an in situ polymeric array synthesis device which
 CC comprises synthesising test probe feature(s) on substrate using in situ
 CC polymeric array synthesis device, contacting test probe feature with at
 CC least two different distinguishably labelled targets and evaluating
 CC binding of labelled targets to test probe feature to detect any pulse jet
 CC misalignment of polymeric array synthesis device. The method is useful
 CC for detecting deposition unit misalignment e.g. printhead misalignment,
 CC of an in situ polymeric, e.g. nucleic acid, array synthesis device. The
 CC method is easy to use, cost effective, effective at detecting printhead
 CC misalignments and may enable immediate detection and/or adjustments of
 CC one or more printheads of an in situ nucleic acid array synthesis fluid
 CC deposition device if misalignment is detected. The present sequence
 CC represents an oligonucleotide synthesised on a microarray.
 XX
 SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.2e+02;
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 24

```

RESULT 285
ADR48249/C
ID ADR48249 standard; DNA; 24 BP.
XX
AC ADR48249;
XX
DT 18-NOV-2004 (first entry)
XX
DE Microarray synthesised oligonucleotide #13.
XX
ss; deposition unit misalignment; polymeric array synthesis;
KW pulse jet misalignment; printhead misalignment; microarray.
XX
OS Synthetic.
XX
FN US2004170984-A1.
XX
PD 02-SEP-2004.
XX
PF 25-FEB-2003; 2003US-00374307.
XX
PR 25-FEB-2003; 2003US-00374307.
XX
PA (LEPR/) LEPROUST E M.
PA (AMOR/) AMORESE D A.
PA (KRON/) KRONICK M N.
XX
PI Leproust EM, Amorese DA, Kronick MN;
DR WPI; 2004-634540/61.
XX
PT Detection of deposition unit misalignment of in situ polymeric array
PT synthesis device, by contacting test probe feature with different
PT distinguishably labeled targets, and evaluating binding of labeled
PT targets to test probe feature.
XX
PS Example 2; Page 16; 36pp; English.
XX
CC The invention relates to a method of detection of deposition unit
CC misalignment of an in situ polymeric array synthesis device which
CC comprises synthesising test probe feature(s) on substrate using in situ
CC polymeric array synthesis device, contacting test probe feature with at
CC least two different distinguishably labelled targets and evaluating
CC binding of labelled targets to test probe feature to detect any pulse jet
CC misalignment of polymeric array synthesis device. The method is useful
CC for detecting deposition unit misalignment e.g. printhead misalignment,
CC of an in situ polymeric, e.g. nucleic acid, array synthesis device. The
CC method is easy to use, cost effective. effective at detecting printhead
CC misalignments and may enable immediate detection and/or adjustments of
CC one or more printheads of an in situ nucleic acid array synthesis fluid
CC deposition device if misalignment is detected. The present sequence
CC represents an oligonucleotide synthesised on a microarray.
XX
SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 286
ADU90278
ID ADU90278 standard; DNA; 24 BP.
XX
AC ADU90278;
XX
DT 10-FEB-2005 (first entry)
XX
DE Allergic response suppressor oligonucleotide #962.
XX
ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
KW immunostimulator; asthma; rhinitis; urticaria; dermatitis;
KW bacterial infection; viral infection.
XX
OS Synthetic.
XX
FN US2004235774-A1.
XX
PD 25-NOV-2004.
XX
PF 23-APR-2004; 2004US-00831778.
XX
PR 03-FEB-2000; 2000US-0179991P.
PR 02-FEB-2001; 2001US-00776479.
XX
PA (BRAT/) BRATZLER R L.
PA (PETE/) PETERSEN D M.
PA (FOUR/) FOURON Y.
XX
PI Bratzler RL, Petersen DM, Fouron Y;
DR WPI; 2004-833006/82.
XX
PT Suppressing allergies, including asthma, rhinitis, urticaria and atopic
PT dermatitis, in a subject, comprises administering a first and second dose
PT of an immunostimulatory nucleic acid.
XX
PS Disclosure; SEQ ID NO 962; 235pp; English.
XX
CC The invention relates to a method of suppressing a symptom of an allergic
CC response in a subject by administering a first and second dose of an
CC immunostimulatory nucleic acid that comprises a nucleotide sequence
CC comprising 5'-cg-3', and where the second dose is administered from 1 day
CC to 8 weeks after the first dose. The methods and compositions of the
CC present invention are useful for the treatment or prevention of asthma
CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
CC an immunostimulatory nucleic acid alone or in combination with other
CC medicaments. They can also be used in preventing bacterial and viral
CC infections. This sequence represents an oligonucleotide used in the
CC method of the invention.
XX
SQ Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 1 AAAAAAAAAAAAAAAAAAAAAA 24

RESULT 287
ADU90277/C
ID ADU90277 standard; DNA; 24 BP.
XX
AC ADU90277;
XX
DT 10-FEB-2005 (first entry)
XX
DE Allergic response suppressor oligonucleotide #961.
XX
ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
KW immunostimulator; asthma; rhinitis; urticaria; dermatitis;
KW bacterial infection; viral infection.
XX
OS Synthetic.
XX
FN US2004235774-A1.
XX

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PD 25-NOV-2004.
XX
XX PF 23-APR-2004; 2004US-00831778.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX PR 02-FEB-2001; 2001US-00776479.
XX
XX (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
XX PI Bratzler RL, Petersen DM, Fouron Y;
XX
XX DR WPI; 2004-833006/82.
XX
XX PT Suppressing allergies, including asthma, rhinitis, urticaria and atopic
XX PT dermatitis, in a subject, comprises administering a first and second dose
XX PT of an immunostimulatory nucleic acid.
XX
XX PS Disclosure; SEQ ID NO 961; 235pp; English.
XX
XX CC The invention relates to a method of suppressing a symptom of an allergic
XX CC response in a subject by administering a first and second dose of an
XX CC immunostimulatory nucleic acid that comprises a nucleotide sequence
XX CC comprising 5'-cg-3', and where the second dose is administered from 1 day
XX CC to 8 weeks after the first dose. The methods and compositions of the
XX CC present invention are useful for the treatment or prevention of asthma
XX CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
XX CC an immunostimulatory nucleic acid alone or in combination with other
XX CC medicaments. They can also be used in preventing bacterial and viral
XX CC infections. This sequence represents an oligonucleotide used in the
XX CC method of the invention.
XX
XX SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 288
ADU89749/C
ID ADU89749 standard; DNA; 24 BP.
XX
XX AC ADU89749;
XX
XX DT 10-FEB-2005 (first entry)
XX
XX DE Allergic response suppressor oligonucleotide #433.
XX
XX KW ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
XX KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
XX KW immunostimulator; asthma; rhinitis; urticaria; dermatitis;
XX KW bacterial infection; viral infection.
XX
XX OS Synthetic.
XX
XX PN US2004235774-A1.
XX
XX PD 25-NOV-2004.
XX
XX PF 23-APR-2004; 2004US-00831778.
XX
XX PR 03-FEB-2000; 2000US-0179991P.
XX PR 02-FEB-2001; 2001US-00776479.
XX
XX (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.

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XX PI Bratzler RL, Petersen DM, Fouron Y;
XX
XX DR WPI; 2004-833006/82.
XX
XX PT Suppressing allergies, including asthma, rhinitis, urticaria and atopic
XX PT dermatitis, in a subject, comprises administering a first and second dose
XX PT of an immunostimulatory nucleic acid.
XX
XX PS Disclosure; SEQ ID NO 433; 235pp; English.
XX
XX CC The invention relates to a method of suppressing a symptom of an allergic
XX CC response in a subject by administering a first and second dose of an
XX CC immunostimulatory nucleic acid that comprises a nucleotide sequence
XX CC comprising 5'-cg-3', and where the second dose is administered from 1 day
XX CC to 8 weeks after the first dose. The methods and compositions of the
XX CC present invention are useful for the treatment or prevention of asthma
XX CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
XX CC an immunostimulatory nucleic acid alone or in combination with other
XX CC medicaments. They can also be used in preventing bacterial and viral
XX CC infections. This sequence represents an oligonucleotide used in the
XX CC method of the invention.
XX
XX SQ Sequence 24 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 0 Other;
XX
Query Match 0.9%; Score 24; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 289
ADV86472/C
ID ADV86472 standard; DNA; 24 BP.
XX
XX AC ADV86472;
XX
XX DT 24-MAR-2005 (first entry)
XX
XX DE Fluorophore-labeled biological detection oligonucleotide #5.
XX
XX KW fluorophore; detection; antibody; antigen; avidin; hormone; ss.
XX
XX OS Synthetic.
XX
XX PN US6838244-B1.
XX
XX PD 04-JAN-2005.
XX
XX PF 18-MAY-2001; 2001US-00859736.
XX
XX PR 19-MAY-2000; 2000US-0205452P.
XX
XX PA (MONS ) MONSANTO TECHNOLOGY LLC.
XX
XX PI Li WR, Zhou JS;
XX
XX DR WPI; 2005-063191/07.
XX
XX PT Novel oligonucleotide molecule labeled with several fluorophores, useful
XX PT for detecting biological molecules e.g., antibody, antigen, avidin or
XX PT protein.
XX
XX PS Example 1; SEQ ID NO 5; 18pp; English.
XX
XX CC The invention relates to an oligonucleotide molecule (ON) labeled with
XX CC several fluorophores of one or more types embedded in its backbone, where
XX CC one or more of the fluorophores is not located at either the 3' or 5'
XX CC terminus of ON. ON is useful for sequencing nucleic molecules. ON is
XX CC useful for detecting biological molecules e.g., antibody, antigen,

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ID AED75711 standard; DNA; 24 BP.
XX
AC AED75711;
XX
XX 12-JAN-2006 (first entry)
XX
DT Immunostimulatory oligonucleotide, SEQ ID 920.
DE
XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
KW Antiulcer; Dermatological; Antiallergic; helper T-lymphocyte;
KW immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
KW Crohns disease; ulcerative colitis; eczema; skin allergy;
KW contact dermatitis; ss.
XX
OS Synthetic.
XX
XX US2005250726-A1.
XX
XX 10-NOV-2005.
XX
XX 12-MAY-2005; 2005US-00127654.
XX
XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
KW Antiulcer; Dermatological; Antiallergic; helper T-lymphocyte;
KW immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
KW Crohns disease; ulcerative colitis; eczema; skin allergy;
KW contact dermatitis; ss.
XX
OS Synthetic.
XX
XX US2005250726-A1.
XX
XX 10-NOV-2005.
XX
XX 12-MAY-2005; 2005US-00127654.
XX
XX 29-MAR-2001; 2001US-0279642P.
XX
XX 29-MAR-2002; 2002US-00112653.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
XX
XX Krieg AM, Berg DJ;
XX
XX WPI; 2005-768014/78.
XX
XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
XX to augment T-helper1 cells like immune activation and to treat non-
XX allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.
XX
XX Disclosure; SEQ ID NO 920; 58pp; English.
XX
XX The present invention relates to a method for augmenting T-helper 1 cells
XX (Th1)-like immune activation in a subject. The method comprises
XX administering an immunostimulatory nucleic acid (I) to induce Th1-like
XX immune activation; and administering a cyclooxygenase inhibitor (II) to
XX inhibit prostaglandin expression, is new. The present sequence is one
XX such immunostimulatory nucleic acid. (I) is useful for treating non-
XX allergic inflammatory diseases such as psoriasis, inflammatory bowel
XX diseases (Crohn's disease and ulcerative colitis), eczema, allergic
XX contact dermatitis or latex dermatitis.
XX
XX Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24; DB 1; Length 24;
XX Best Local Similarity 100.0%; Pred. No. 4.2e+02;
XX Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 1 AAAAAAAAAAAAAAAAAAAAAA 24

RESULT 293
AED75710/c
ID AED75710 standard; DNA; 24 BP.
XX
XX AED75710;
XX
XX 12-JAN-2006 (first entry)
XX
DE Immunostimulatory oligonucleotide, SEQ ID 919.
XX
XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
KW Antiulcer; Dermatological; Antiallergic; helper T-lymphocyte;
KW immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
KW Crohns disease; ulcerative colitis; eczema; skin allergy;
KW contact dermatitis; ss.
XX
XX Sequence 24 BP; 24 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24; DB 1; Length 24;
XX Best Local Similarity 100.0%; Pred. No. 4.2e+02;
XX Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 1 AAAAAAAAAAAAAAAAAAAAAA 24

RESULT 294
AAV42215/c
ID AAV42215 standard; DNA; 25 BP.
XX
XX AAV42215;
XX
XX 16-OCT-1998 (first entry)
XX
XX Sequencing primer used to exemplify the invention.
XX
XX Incyte clone 1; fluorescent label; probe; primer; DNA sequencing; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1 /*tag= a
FT /*note= "labelled with the donor carboxyfluorescein"
FT modified_base 7 /*tag= b
FT /*note= "optionally labelled with the acceptor 6-
FT carboxyrhodamine"
FT modified_base 14 /*tag= b
FT /*note= "optionally labelled with the acceptor 6-
FT carboxyrhodamine"
FT modified_base 17 /*tag= a
FT

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FT      /note= "optionally labelled with the donor
FT      carboxyfluorescein"
FT      17
FT      /*tag= b
FT      /note= "optionally labelled with the acceptor 6-
FT      carboxyrhodamine"
XX
PN      WO9831834-A1.
XX
XX      23-JUL-1998.
XX
XX      12-DEC-1997; 97WO-US022914.
XX
XX      15-JAN-1997; 97US-00784162.
XX      (INCY-) INCYTE PHARM INC.
XX      Ju J;
XX
XX      WPI; 1998-414127/35.
XX
XX      Set of energy-transfer fluorescent labels with donor and acceptor at
XX      different separations - useful for DNA sequencing allows use of fewer
XX      analysing wavelengths or an increased throughput.
XX
XX      Example 1; Page 14; 30pp; English.
XX
XX      The present sequence exemplified the primer of the invention, and is
XX      used to sequence Incyte clone 1 (AAV42737). The primer of the invention
XX      is labelled with a set of at least 2 different fluorescent labels. The
XX      set comprises an energy-transfer fluorescent label with at least 1 each
XX      of a donor fluorophore and an acceptor fluorophore capable of energy
XX      transfer, and separated by a distance x, and a second similar fluorescent
XX      label in which the separation distance is y, x and y being sufficiently
XX      different for the two fluorescent labels to produce distinct fluorescent
XX      signals. Fluorescent labels are useful to produce distinct fluorescent
XX      as probes for fluorescent in situ hybridisation or especially as primers
XX      for DNA sequencing
XX
XX      Sequence 25 BP; 1 A; 1 C; 0 G; 23 T; 0 U; 0 Other;
XX
XX      Query Match 0.9%; Score 24; DB 1; Length 25;
XX      Best Local Similarity 100.0%; Pred. No. 4.3e+02;
XX      Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY      2708 TAAAAAATAAAAAAAAAAAAAAAAAA 2731
QY      |||||
Db      24 TAAAAAATAAAAAAAAAAAAAAAAAA 1

RESULT 295
AAx84258/c
ID AAX84258 standard; DNA; 25 BP.
XX
XX AAX84258;
XX
XX 08-SEP-1999 (first entry)
XX
XX PCR primer for human Nck associated protein 1 coding sequence.
XX
XX Nck associated protein 1; Nap1; human; apoptosis; Alzheimer's disease;
XX therapy; PCR primer; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX WO9931239-A1.
XX
XX 24-JUN-1999.
XX
XX 14-DEC-1998; 98WO-JP005646.
XX
XX 15-DEC-1997; 97JP-00363183.
XX
XX (KYOW ) KYOWA HAKKO KOGYO KK.
XX (SAKA/) SAKAKI Y.
XX
XX Sakaki Y;
XX
XX WPI; 1999-395181/33.
XX
XX Protein inhibiting apoptosis, useful in the diagnosis and treatment of
XX Alzheimer's disease.
XX
XX Disclosure; Page 77; 90pp; Japanese.
XX
XX This sequence represents a PCR primer used to isolate DNA encoding the
XX human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits
XX apoptosis. The protein can be used in the investigation, diagnosis and
XX treatment (e.g. by gene therapy) of Alzheimer's disease
XX
XX Sequence 25 BP; 0 A; 1 C; 0 G; 24 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24; DB 1; Length 25;
XX      Best Local Similarity 100.0%; Pred. No. 4.3e+02;
XX      Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY      2709 AAAAAAATAAAAAAAAAAAAAAAAAA 2732
QY      |||||
Db      24 AAAAAAATAAAAAAAAAAAAAAAAAA 1

RESULT 296
AAx84260/c
ID AAX84260 standard; DNA; 25 BP.
XX
XX AAX84260;
XX
XX 08-SEP-1999 (first entry)
XX
XX PCR primer for human Nck associated protein 1 coding sequence.
XX
XX Nck associated protein 1; Nap1; human; apoptosis; Alzheimer's disease;
XX therapy; PCR primer; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX WO9931239-A1.
XX
XX 24-JUN-1999.
XX
XX 14-DEC-1998; 98WO-JP005646.
XX
XX 15-DEC-1997; 97JP-00363183.
XX
XX (KYOW ) KYOWA HAKKO KOGYO KK.
XX (SAKA/) SAKAKI Y.
XX
XX Sakaki Y;
XX
XX WPI; 1999-395181/33.
XX
XX Protein inhibiting apoptosis, useful in the diagnosis and treatment of
XX Alzheimer's disease.
XX
XX Disclosure; Page 77; 90pp; Japanese.
XX
XX This sequence represents a PCR primer used to isolate DNA encoding the
XX human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits
XX apoptosis. The protein can be used in the investigation, diagnosis and
XX treatment (e.g. by gene therapy) of Alzheimer's disease
XX
XX Sequence 25 BP; 0 A; 1 C; 0 G; 24 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24; DB 1; Length 25;

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XX      (KYOW ) KYOWA HAKKO KOGYO KK.
XX      (SAKA/) SAKAKI Y.
XX
XX      Sakaki Y;
XX
XX      WPI; 1999-395181/33.
XX
XX      Protein inhibiting apoptosis, useful in the diagnosis and treatment of
XX      Alzheimer's disease.
XX
XX      Example 1; Page 76; 90pp; Japanese.
XX
XX      This sequence represents a PCR primer used to isolate DNA encoding the
XX      human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits
XX      apoptosis. The protein can be used in the investigation, diagnosis and
XX      treatment (e.g. by gene therapy) of Alzheimer's disease
XX
XX      Sequence 25 BP; 0 A; 0 C; 1 G; 24 T; 0 U; 0 Other;
XX
XX      Query Match 0.9%; Score 24; DB 1; Length 25;
XX      Best Local Similarity 100.0%; Pred. No. 4.3e+02;
XX      Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY      2709 AAAAAAATAAAAAAAAAAAAAAAAAA 2732
QY      |||||
Db      24 AAAAAAATAAAAAAAAAAAAAAAAAA 1

RESULT 296
AAx84260/c
ID AAX84260 standard; DNA; 25 BP.
XX
XX AAX84260;
XX
XX 08-SEP-1999 (first entry)
XX
XX PCR primer for human Nck associated protein 1 coding sequence.
XX
XX Nck associated protein 1; Nap1; human; apoptosis; Alzheimer's disease;
XX therapy; PCR primer; ss.
XX
XX Synthetic.
XX
XX Homo sapiens.
XX
XX WO9931239-A1.
XX
XX 24-JUN-1999.
XX
XX 14-DEC-1998; 98WO-JP005646.
XX
XX 15-DEC-1997; 97JP-00363183.
XX
XX (KYOW ) KYOWA HAKKO KOGYO KK.
XX (SAKA/) SAKAKI Y.
XX
XX Sakaki Y;
XX
XX WPI; 1999-395181/33.
XX
XX Protein inhibiting apoptosis, useful in the diagnosis and treatment of
XX Alzheimer's disease.
XX
XX Disclosure; Page 77; 90pp; Japanese.
XX
XX This sequence represents a PCR primer used to isolate DNA encoding the
XX human Nck associated protein 1 (Nap1) of the invention. Nap1 inhibits
XX apoptosis. The protein can be used in the investigation, diagnosis and
XX treatment (e.g. by gene therapy) of Alzheimer's disease
XX
XX Sequence 25 BP; 0 A; 1 C; 0 G; 24 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24; DB 1; Length 25;

```

Best Local Similarity 100.0%; Pred. No. 4.3e+02; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 297

ACF79235/c

ID ACF79235 standard; DNA; 25 BP.

XX ACF79235;

AC ACF79235;

XX 04-DEC-2003 (first entry)

DT

XX Calix(a)arene-oligonucleotide hybrid.

DE

XX Calix(4)arene; triplex; gene therapy; DNA sensor; ss.

XX Synthetic.

OS

XX Key

FH Location/Qualifiers

FT stem_loop 1..25

FT /tag= a

FT modified_base 13

FT /tag= a

FT /mod_base= OTHER

FT /note= "OTHER= calix(4)arene nucleoside"

FT

XX WO2003059925-A1.

PN

XX 24-JUL-2003.

PD

XX 19-JUN-2002; 2002WO-KR001160.

XX

XX 15-JAN-2002; 2002KR-00002316.

PR

XX (POST-) POSTECH FOUND.

XX

XX Kim BH, Kim SJ;

PI

XX WPI; 2003-627375/59.

DR

XX New calix(4)arene-nucleoside hybrid useful in gene therapy has at least

PT one nucleoside attached to a calix(4)arene group through amide bonding,

PT and is derived from a calix(4)arene having amino groups.

PT

XX Claim 7; Page 20; 16pp; English.

XX

XX The present sequence is that of a calix(4)arene-oligonucleotide hybrid of

CC the invention, which includes a calix(4)arene-nucleoside (preferably

CC thymidine) derivative. The calix(4)arene-oligonucleotide hybrid functions

CC as a DNA hairpin structure mimic. It effectively recognises DNA or RNA

CC through triplex formation by bonding between the calix(4)arene-containing

CC cavity and a biologically active substance. The hybrid has a certain

CC level of both rigidity and flexibility, is stable in vivo, has high cell

CC permeability and can be mass-produced. It can be used as a DNA sensor or

CC for gene therapy

XX

SQ Sequence 25 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 1 Other;

Query Match

Best Local Similarity 0.9%; Score 24; DB 1; Length 25;

Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2733

Db 25 AAAAAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 298

AEA31163

AEA31163 standard; DNA; 25 BP.

AC AEA31163;

XX 11-AUG-2005 (first entry)

DT

XX Murine DNA oligonucleotide #10.

DE

XX Transposon; retrotransposon; genetic disorder; hemophilia;

KW Parkinsons disease; Fabry disease; hypercholesterolemia;

KW Gauchers disease; cystic fibrosis; adrenoleukodystrophy;

KW adenosine deaminase deficiency; alpha-1 antitrypsin deficiency;

KW Duchenne dystrophy; phenylketonuria; sickle cell anemia;

KW Tay Sachs disease; thalassemia; lysosomal storage disease;

KW metabolic disorder; antiparkinsonian; hemostatic; antileptic;

KW CNS-Gen.; respiratory-gen.; antianemic; cerebroprotective; muscular-gen.;

KW dermatological; nootropic; antistickling; ss.

XX

OS Mus sp.

XX WO2005049789-A2.

PN

XX 02-JUN-2005.

XX

XX 18-MAY-2004; 2004WO-US015810.

XX

XX 28-MAY-2003; 2003US-0473658P.

PR

XX (UYJO) UNIV JOHNS HOPKINS.

XX

XX Boeke JD, Han JS;

XX

XX WPI; 2005-396089/40.

DR

XX New synthetic mammalian (retro)transposon open reading frame 2 (ORF2) or

PT ORF1 gene exhibiting a higher level of expression relative to a natural

PT L1 (retro)transposon ORF2 or ORF1 gene, useful for treating e.g.,

PT metabolic diseases.

PT

XX Example 1; SEQ ID NO 14; 66pp; English.

XX

XX The invention relates to a synthetic mammalian (retro)transposon ORF2 or

CC ORF1 gene exhibiting a higher level of expression relative to a natural

CC L1 (retro)transposon ORF2 or ORF1 gene. The invention also relates to a

CC (retro)transposon comprising the synthetic gene, a mammalian L1

CC retrotransposon comprising the synthetic gene, a recombinant vector

CC construct comprising the synthetic gene, a eukaryotic cell transfected,

CC transformed or infected with the recombinant vector construct, a method

CC of delivering a desired gene, or its biologically active fragment, to the

CC cells of a mammal, a composition comprising a cassette comprising the

CC gene, a desired gene and a pharmaceutical carrier, and a method of

CC identifying an uncharacterized gene, or its biologically active fragment,

CC in cells. The composition is useful for treating a genetic disorder in a

CC mammal such as hemophilia, Parkinsons disease, Fabry disease,

CC hypercholesterolemia, Gauchers disease, cystic fibrosis,

CC adrenoleukodystrophy, disorders associated with mutations in the

CC dystrophin gene, adenosine deaminase deficiency, alpha-antitrypsin

CC deficiency, Duchenne muscular dystrophy, phenylketonuria, sickle cell

CC anemia, Tay Sachs disease, thalassemia, lysosomal storage diseases and

CC metabolic disorders. The synthetic gene is useful for treating the

CC diseases. This sequence represents a murine DNA oligonucleotide used in

CC the scope of the invention.

XX

SQ Sequence 25 BP; 24 A; 1 C; 0 G; 0 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.9%; Score 24; DB 1; Length 25;

Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2732

Db 1 AAAAAAAAAAAAAAAAAAAAAAAAAA 24


```

RESULT 299
AEA31164
ID AEA31164 standard; DNA; 25 BP.
XX
AC AEA31164;
XX
DT 11-AUG-2005 (first entry)
XX
DE Murine DNA oligonucleotide #11.
XX
KW Transposon; retrotransposon; genetic disorder; hemophilia;
KW Parkinsons disease; Fabry disease; hypercholesterolemia;
KW Gauchers disease; cystic fibrosis; adrenoleukodystrophy;
KW adenosine deaminase deficiency; alpha-1 antitrypsin deficiency;
KW Duchenne dystrophy; phenylketonuria; sickle cell anemia;
KW Tay Sachs disease; thalassemia; lysosomal storage disease;
KW metabolic disorder; antiparkinsonian; hemostatic; metabolic; antilipemic;
KW CNS-Gen.; respiratory-gen.; antianemic; cerebroprotective; muscular-gen.;
KW dermatological; nootropic; antisickling; ss.
XX
OS Mus sp.
XX
XX WO2005049789-A2.
XX
XX 02-JUN-2005.
XX
XX 18-MAY-2004; 2004WO-US015810.
XX
XX 28-MAY-2003; 2003US-0473658P.
XX
XX (UYJO ) UNIV JOHNS HOPKINS.
XX
XX Boeke JD, Han JS;
XX
XX WPI; 2005-396089/40.
XX
XX New synthetic mammalian (retro)transposon open reading frame 2 (ORF2) or
XX ORF1 gene exhibiting a higher level of expression relative to a natural
XX L1 (retro)transposon ORF2 or ORF1 gene, useful for treating e.g.,
XX metabolic diseases.
XX
XX Example 1; SEQ ID NO 15; 66pp; English.
XX
CC The invention relates to a synthetic mammalian (retro)transposon ORF2 or
CC ORF1 gene exhibiting a higher level of expression relative to a natural
CC L1 (retro)transposon ORF2 or ORF1 gene. The invention also relates to a
CC (retro)transposon comprising the synthetic gene, a mammalian L1
CC retrotransposon comprising the synthetic gene, a recombinant vector
CC construct comprising the synthetic gene, a eukaryotic cell transfected,
CC transformed or infected with the recombinant vector construct, a method
CC of delivering a desired gene, or its biologically active fragment, to the
CC cells of a mammal, a composition comprising a cassette comprising the
CC gene, a desired gene and a pharmaceutical carrier, and a method of
CC identifying an uncharacterized gene, or its biologically active fragment,
CC in cells. The composition is useful for treating a genetic disorder in a
CC mammal such as hemophilia, Parkinsons disease, Fabry disease,
CC adrenoleukodystrophy, disorders associated with mutations in the
CC dystrophin gene, adenosine deaminase deficiency, alpha-antitrypsin
CC deficiency, Duchenne muscular dystrophy, phenylketonuria, sickle cell
CC anemia, Tay Sachs disease, thalassemia, lysosomal storage diseases and
CC metabolic disorders. The synthetic gene is useful for treating the
CC diseases. This sequence represents a murine DNA oligonucleotide used in
CC the scope of the invention.
XX
SQ Sequence 25 BP; 24 A; 0 C; 1 G; 0 T; 0 U; 0 Other;
Query Match 0.9%; Score 24; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 4.3e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732

```

```

Db 1 AAAAAAAAAAAAAAAAAAAAAA 24
RESULT 300
AEA31162
ID AEA31162 standard; DNA; 25 BP.
XX
AC AEA31162;
XX
DT 11-AUG-2005 (first entry)
XX
DE Murine DNA oligonucleotide #9.
XX
KW Transposon; retrotransposon; genetic disorder; hemophilia;
KW Parkinsons disease; Fabry disease; hypercholesterolemia;
KW Gauchers disease; cystic fibrosis; adrenoleukodystrophy;
KW adenosine deaminase deficiency; alpha-1 antitrypsin deficiency;
KW Duchenne dystrophy; phenylketonuria; sickle cell anemia;
KW Tay Sachs disease; thalassemia; lysosomal storage disease;
KW metabolic disorder; antiparkinsonian; hemostatic; metabolic; antilipemic;
KW CNS-Gen.; respiratory-gen.; antianemic; cerebroprotective; muscular-gen.;
KW dermatological; nootropic; antisickling; ss.
XX
OS Mus sp.
XX
XX WO2005049789-A2.
XX
XX 02-JUN-2005.
XX
XX 18-MAY-2004; 2004WO-US015810.
XX
XX 28-MAY-2003; 2003US-0473658P.
XX
XX (UYJO ) UNIV JOHNS HOPKINS.
XX
XX Boeke JD, Han JS;
XX
XX WPI; 2005-396089/40.
XX
XX New synthetic mammalian (retro)transposon open reading frame 2 (ORF2) or
XX ORF1 gene exhibiting a higher level of expression relative to a natural
XX L1 (retro)transposon ORF2 or ORF1 gene, useful for treating e.g.,
XX metabolic diseases.
XX
XX Example 1; SEQ ID NO 13; 66pp; English.
XX
CC The invention relates to a synthetic mammalian (retro)transposon ORF2 or
CC ORF1 gene exhibiting a higher level of expression relative to a natural
CC L1 (retro)transposon ORF2 or ORF1 gene. The invention also relates to a
CC (retro)transposon comprising the synthetic gene, a mammalian L1
CC retrotransposon comprising the synthetic gene, a recombinant vector
CC construct comprising the synthetic gene, a eukaryotic cell transfected,
CC transformed or infected with the recombinant vector construct, a method
CC of delivering a desired gene, or its biologically active fragment, to the
CC cells of a mammal, a composition comprising a cassette comprising the
CC gene, a desired gene and a pharmaceutical carrier, and a method of
CC identifying an uncharacterized gene, or its biologically active fragment,
CC in cells. The composition is useful for treating a genetic disorder in a
CC mammal such as hemophilia, Parkinsons disease, Fabry disease,
CC hypercholesterolemia, Gauchers disease, cystic fibrosis,
CC adrenoleukodystrophy, disorders associated with mutations in the
CC dystrophin gene, adenosine deaminase deficiency, alpha-antitrypsin
CC deficiency, Duchenne muscular dystrophy, phenylketonuria, sickle cell
CC anemia, Tay Sachs disease, thalassemia, lysosomal storage diseases and
CC metabolic disorders. The synthetic gene is useful for treating the
CC diseases. This sequence represents a murine DNA oligonucleotide used in
CC the scope of the invention.
XX
SQ Sequence 25 BP; 24 A; 0 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 0.9%; Score 24; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 4.3e+02;

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Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 1 AAAAAAAAAAAAAAAAAAAAAA 24

RESULT 301
AEC63371/c
ID AEC63371 standard; DNA; 25 BP.
AC AEC63371;
XX
XX 03-NOV-2005 (first entry)
DE Oligonucleotide of the invention SEQ ID NO:1.
KW ss; RNA interference; antisense therapy; gene therapy.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 13
FT /*tag= a
FT /*mod_base= OTHER
FT /*note= "OTHER=cholane-3,24-diol"

XX KR2005023131-A.
XX
XX 09-MAR-2005.
XX
XX 26-AUG-2003; 2003KR-00058936.
XX
XX 26-AUG-2003; 2003KR-00058936.
XX
XX (POST-) POSTECH FOUND.
XX
XX Bang EK, Kim BH, Kim SJ;
XX
XX WPI; 2005-588200/60.
XX
XX Oligonucleotides comprising cholane-3,24-diol(3 alpha, 5 beta) unit which
XX are easily absorbed into the cells, have stable structure, and form hair-
XX pin loop structure useful in RNA interference or antisense application.
XX
XX Claim 3; SEQ ID NO 1; 13pp; Korean.
XX
XX The invention relates to novel oligonucleotides comprising cholane-3,24-
XX diol(3alpha,5beta) unit are provided, which are easily absorbed into
XX cells, have a stable structure, and form a hair-pin loop structure, so
XX that they can be used for antisense/antigene therapy or RNAi (RNA
XX interference). The present sequence represents an oligonucleotide of the
XX invention.
XX
XX Sequence 25 BP; 0 A; 0 C; 0 G; 24 T; 0 U; 1 Other;

Query Match 0.9%; Score 24; DB 1; Length 25;
Best Local Similarity 96.0%; Pred. NO. 4.3e+02;
Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 302
AAA40358/c
ID AAA40358 standard; DNA; 28 BP.
XX
XX AAA40358;
XX
XX 10-NOV-2000 (first entry)
XX
```

```
DE pBluescriptSK+ phagemid primer SEQ ID NO: 8.
XX
XX Primer; cloning; ligation; ss.
XX
XX Synthetic.
XX
XX WO200036088-A1.
XX
XX 22-JUN-2000.
XX
XX 17-DEC-1999; 99WO-US030277.
XX
XX 17-DEC-1998; 98US-00213834.
XX
XX (ROMA/) ROMANTCHIKOV Y.
XX
XX Romantchikov Y;
XX
XX WPI; 2000-442381/38.
XX
XX Inserting a nucleic acid into a circular vector comprising joining their
XX ends, melting, and reannealing ends at two different concentrations,
XX useful for cloning small amounts of nucleic acids and forming genomic
XX libraries.
XX
XX Example 3; Page 67; 71pp; English.
XX
XX This invention describes a novel method (M1) for inserting a nucleic acid
XX (N1) into a circular vector (V1) comprising joining ends of N1 and V1
XX under a first nucleic acid concentration, melting hybridized cohesive
XX circularization ends, and reannealing the ends at a second concentration.
XX The methods are useful for the cloning small amounts of nucleic acids and
XX forming genomic libraries of complex populations of DNA or cDNA. The
XX methods allow the cloning of minute amounts of nucleic acids efficiently
XX and avoids the size selection problems of prior art systems. Larger
XX nucleic acid fragments are just as easily cloned, allowing highly
XX representative libraries to be made. Vector to vector ligation is avoided
XX using the methods. AAA40351-A40366 represents primers used to illustrate
XX the method of the invention
XX
XX Sequence 28 BP; 1 A; 1 C; 1 G; 25 T; 0 U; 0 Other;

Query Match 0.9%; Score 24; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. NO. 4.5e+02;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 28 AAAAAAAAAAAAAAAAAAAAAA 5

RESULT 303
AAA40362/c
ID AAA40362 standard; DNA; 28 BP.
XX
XX AAA40362;
XX
XX 10-NOV-2000 (first entry)
XX
XX pBluescriptSK+ phagemid primer SEQ ID NO: 12.
XX
XX Primer; cloning; ligation; ss.
XX
XX Synthetic.
XX
XX WO200036088-A1.
XX
XX 22-JUN-2000.
XX
XX 17-DEC-1999; 99WO-US030277.
XX
XX 17-DEC-1998; 98US-00213834.
XX
```

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PA (ROMA/) ROMANTCHIKOV Y.
XX
FI Romantchikov Y;
XX
XX WPI; 2000-442381/38.
XX
XX Inserting a nucleic acid into a circular vector comprising joining their
XX ends, melting, and reannealing ends at two different concentrations,
XX useful for cloning small amounts of nucleic acids and forming genomic
XX libraries.
XX
XX Example 4; Page 68; 7lpp; English.
XX
XX This invention describes a novel method (M1) for inserting a nucleic acid
XX (N1) into a circular vector (V1) comprising joining ends of N1 and V1
XX under a first nucleic acid concentration, melting hybridized cohesive
XX circularization ends, and reannealing the ends at a second concentration.
XX The methods are useful for the cloning small amounts of nucleic acids and
XX forming genomic libraries of complex populations of DNA or cDNA. The
XX methods allow the cloning of minute amounts of nucleic acids efficiently
XX and avoids the size selection problems of prior art systems. Larger
XX nucleic acid fragments are just as easily cloned, allowing highly
XX representative libraries to be made. Vector to vector ligation is avoided
XX using the methods. AAA40351-A40366 represents primers used to illustrate
XX the method of the invention
XX
XX Sequence 28 BP; 0 A; 2 C; 2 G; 24 T; 0 U; 0 Other;
XX
XX Query Match 0.9%; Score 24; DB 1; Length 28;
XX Best Local Similarity 100.0%; Pred. No. 4.5e+02; Indels 0; Gaps 0;
XX Matches 24; Conservative 0; Mismatches 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
XX |||||
XX Db 28 AAAAAAAAAAAAAAAAAAAAAA 5
XX
XX RESULT 304
XX AAA57856/c
XX ID AAA57856 standard; DNA; 28 BP.
XX
XX AC AAA57856;
XX
XX DT 11-OCT-2000 (first entry)
XX
XX DE Decoy-T22-tagged substrate oligonucleotide.
XX
XX KW Ribozyme; catalytic RNA; analyte detection; effector molecule;
XX KW nucleic acid substrate; in vitro selection; ribozyme ligase;
XX KW conformation dependent activity; allosteric activation; ss.
XX
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX FT misc_RNA 23..28
XX FT /*tag= a
XX FT misc_binding 24..28
XX FT /*tag= b
XX FT /bound_moiety= "Bases 13-17 of N90 RNA pool (AAA57851)"
XX
XX FN WO200024931-A2.
XX
XX PD 04-MAY-2000.
XX
XX PF 22-OCT-1999; 99WO-IL000557.
XX
XX PR 23-OCT-1998; 98IL-00126731.
XX
XX PA (INTE-) INTELLIGENE LTD.
XX
XX PI Nathan A, Ellington A;
XX
XX DR WPI; 2000-350763/30.

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XX Detecting an analyte in a sample comprises providing nucleic acid
XX sequence which is catalytically active in presence of analyte, contacting
XX catalytic nucleic acid with substrate and amplifying catalytic product.
XX
XX Disclosure; Page; 36pp; English.
XX
XX The invention relates to a method of detecting an analyte in a sample.
XX The method comprises providing a nucleic acid sequence which is initially
XX catalytically inactive, but which becomes catalytically active in the
XX presence of an analyte (the effector); providing a nucleic acid substrate
XX for the catalytic activity of the nucleic acid sequence; and contacting
XX the nucleic acid sequence and the substrate with the sample under
XX conditions allowing catalytic activity of nucleic acid sequences. The
XX catalytic nucleic acid sequence will be able to convert the nucleic acid
XX substrate into a nucleic acid product only if the analyte of interest is
XX present. The nucleic acid catalytic product is then amplified, and a
XX significant increase in the amount of product indicates the presence of
XX the analyte in the sample. The method is useful for the qualitative or
XX quantitative determination of an analyte in a sample in diagnostic
XX assays. The invention describes the in vitro selection of a ribozyme
XX ligase (L1; AAA57859, AAA57860) which is catalytically active only in the
XX presence of an oligonucleotide effector (AAA57854). The L1 ribozyme
XX ligase was selected from a pool of RNA molecules comprising a central
XX randomised region 90 nucleotides in length flanked on both sides by
XX constant sequence regions (the N90 RNA pool; AAA57851). In the presence
XX of the effector, selection was performed using one of the tagged
XX substrate molecules AAA57855-A57857. RNAs with ligase activity (i.e.,
XX those which have become ligated to the substrate molecule) were reverse
XX transcribed using the effector oligo, and then PCR amplified using the
XX effector and a DNA primer identical in sequence to the substrate used for
XX the selection. A ribozyme ligase, L1, was selected via this procedure. L1
XX can only adopt its active conformation (AAA57859) in the presence of the
XX effector oligo (analyte). In the absence of the effector, L1 adopts an
XX inactive conformation (AAA57860). The present sequence represents the
XX decoy-T22-tagged substrate oligonucleotide. The dt22 tag enables
XX successfully ligated products to be isolated using oligo(dA) cellulose
XX Type 7. Note: The present sequence is not given in the specification, but
XX is created from the information given on page 11
XX
XX Sequence 28 BP; 1 A; 2 C; 1 G; 22 T; 2 U; 0 Other;
XX
XX Query Match 0.9%; Score 23.8; DB 1; Length 28;
XX Best Local Similarity 92.6%; Pred. No. 4.7e+02;
XX Matches 25; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 2704 GTACTAAAAAAAAAAAAAAAAAAAAA 2730
XX |||
XX Db 27 GTGCAAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 305
XX AAL44903/c
XX ID AAL44903 standard; DNA; 29 BP.
XX
XX AC AAL44903;
XX
XX DT 05-AUG-2002 (first entry)
XX
XX DE Triplex forming oligonucleotide #4.
XX
XX KW Cancer; cytostatic; gene therapy; triplex forming oligonucleotide; ds.
XX
XX OS Unidentified.
XX
XX FN KR2001086830-A.
XX
XX PD 15-SEP-2001.
XX
XX PF 03-MAR-2000; 2000KR-00010744.
XX
XX PR 03-MAR-2000; 2000KR-00010744.
XX
XX

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PA (KOCH-) KOREA CHUNGANG EDUCATIONAL FOUND.
 XX Choi JG, Lee DH, Lee GY, Park GH, Park MG, Son JW;
 XX WPI; 2002-233771/29.
 XX
 XX Novel triplex forming synthetic oligonucleotide, useful for gene therapy
 PT of tumor.
 XX
 XX Claim 4; Page 11; 13pp; Korean.
 PS
 CC The present invention relates to a triplex forming oligonucleotide which
 CC specifically binds to a specific gene. This is useful for the gene
 CC therapy of cancer by binding itself to Auger electron emitters. The
 CC present sequence is a triplex forming oligonucleotide of the invention
 XX
 XX Sequence 29 BP; 0 A; 1 C; 3 G; 25 T; 0 U; 0 Other;
 SQ

Query Match 0.9%; Score 23.8; DB 1; Length 29;
 Best Local Similarity 92.8%; Pred. No. 4.8e+02;
 Matches 25; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2735
 ||||| ||||| ||||| ||||| ||||| |||||
 Db 28 AAAAAAAAAACACAAAAAAAAAAAAAAAAA 2

RESULT 306
 AAV12482
 ID AAV12482 standard; DNA; 26 BP.
 XX
 AC AAV12482;
 XX
 XX 15-MAY-1998 (first entry)
 DT
 DE Oligonucleotide SEQ ID NO:5 from US5174320 Example 2.
 XX
 XX Synthesis; selection; amplification; circular oligonucleotide;
 KW rolling circle synthesis; diagnosis; therapeutic agent; ss.
 KW
 XX Synthetic.
 OS
 XX US5714320-A.
 PN
 XX 03-FEB-1998.
 PD
 XX 23-FEB-1995; 95US-00393439.
 PF
 XX 15-APR-1993; 93US-00047860.
 PR
 XX (UYRP) UNIV ROCHESTER.
 PA
 XX Kool ET;
 PI
 XX WPI; 1998-144278/13.
 DR
 XX
 XX Rolling circle synthesis of oligo:nucleotide(s) - using primed circular
 PT template to produce oligonucleotide multimer for cleavage.
 PT
 XX Example 2; Col 45; 38pp; English.
 PS
 XX The present sequence represents an oligonucleotide used in an example of
 CC the present invention. The present invention describes a method for
 CC synthesizing a selected oligonucleotide (I) having well defined ends. The
 CC method comprises: (a) annealing a primer to a single-stranded (ss)
 CC circular template to yield a primed circular template, where the template
 CC comprises: (i) at least one nucleotide sequence complementary to (I); and
 CC (ii) at least one nucleotide effective to produce a cleavage site in the
 CC oligonucleotide multimer; (b) combining the primed circular template with
 CC at least two types of nucleotide triphosphates and a polymerase enzyme
 CC without the addition of auxiliary proteins to yield a ss oligonucleotide
 CC multimer complementary to the circular oligonucleotide template,
 CC comprising multiple copies of (I); and (c) cleaving the oligonucleotide

CC multimer at the cleavage site to produce (I) having well defined ends.
 CC The method is used for the large-scale synthesis of DNA and RNA oligomers
 CC for use, e.g. as probes and diagnostic agents and/or therapeutic agents
 XX
 SQ Sequence 26 BP; 24 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.9%; Score 23.4; DB 1; Length 26;
 Best Local Similarity 96.0%; Pred. No. 4.8e+02;
 Matches 24; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
 ||||| ||||| ||||| ||||| ||||| |||||
 Db 2 AAAAAAAAAACACAAAAAAAAAAAAAAAAA 26

RESULT 307
 AAV59215
 ID AAV59215 standard; DNA; 26 BP.
 XX
 AC AAV59215;
 XX
 XX 21-OCT-2004 (revised)
 DT 14-DEC-1998 (first entry)
 DE
 DE Circular template for linear oligomer dt12.
 XX
 XX ss; circular; cyclic; RNA oligonucleotide; probe; standard; diagnostic;
 KW therapeutic agent.
 KW
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 FH misc_binding 1
 FT /tag= a
 FT /bound_moiety= "Position 1 optionally bound to position
 26"
 FT 26
 FT misc_binding
 FT /tag= b
 FT /bound_moiety= "Position 26 optionally bound to position
 1"
 FT
 XX WO9838300-A1.
 PN
 XX 03-SEP-1998.
 PD
 XX 26-FEB-1998; 98WO-US003784.
 PF
 XX 26-FEB-1997; 97US-00805631.
 PR
 XX (UYRP) UNIV ROCHESTER.
 PA
 XX Kool ET;
 PI
 XX WPI; 1998-481202/41.
 DR
 XX
 XX Synthesis of oligo:nucleotide(s) - using a single-stranded circular
 PT oligo:nucleotide template ribonucleotide triphosphate(s) and a
 PT polymerase to form multimer(s) which can be cleaved.
 PT
 XX Example 2; Page 36; 100pp; English.
 PS
 XX The circular template was used for the synthesis of the oligomer dt12 in
 CC an example of the method of the invention for synthesizing an RNA
 CC oligonucleotide, comprising combining a single-stranded circular
 CC oligonucleotide template comprising at least one copy of a nucleotide
 CC sequence complementary to the sequence of the desired RNA oligonucleotide
 CC with at least 2 types of ribonucleotide triphosphate and a polymerase
 CC enzyme to yield a single-stranded RNA oligonucleotide multimer
 CC complementary to the circular oligonucleotide template, where the RNA
 CC oligonucleotide multimer comprises multiple copies of the desired RNA
 CC oligonucleotide. The methods can be used for producing RNA
 CC oligonucleotides having a specific sequence and well defined ends. The
 CC RNA oligonucleotides produced can be used as probes, standards and


```

RESULT 312
ADG76060/c
ID   ADG76060 standard; DNA; 28 BP.
AC
AC   ADG76060;
XX
XX   11-MAR-2004 (first entry)
DT
XX
XX   Non-CpG DNA oligonucleotide 61.
DE
XX
XX   ss; non-CpG; immunostimulatory; non-palindromic; immune response;
KW proliferation; differentiation; cytokine; antibody production; B-cell;
KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
KW renal cell carcinoma.
XX
XX   Synthetic.
OS
XX
XX   WO2003101375-A2.
PN
XX
XX   11-DEC-2003.
PD
XX
XX   30-MAY-2003; 2003WO-EP005691.
PF
XX
XX   30-MAY-2002; 2002CA-02388049.
PR
XX
XX   (IMMU-) IMMUNOTECH SA.
PA
XX
XX   Lopez RA;
PI
XX
XX   WPI; 2004-053333/05.
DR
XX
XX   New immunostimulatory oligonucleotide comprising non-palindromic nucleic
PT acid sequence motif, useful for inducing B-cell activation, treating,
PT preventing or ameliorating immune system disorder or tumoral disease e.g.
PT melanoma.
XX
XX   Example 17; Page 82; 139pp; English.
XX
XX   This invention relates to novel immunostimulatory oligonucleotides that
CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
CC oligonucleotides (without a CpG motif), which can stimulate an immune
CC response in animals of the order of primate, including humans. The immune
CC response is characterised by the proliferation, differentiation, cytokine
CC and antibody production in B-cells, as well as cell differentiation and
CC cytokine production in plasmacytoid dendritic cells. The present
CC invention describes immunomodulator compositions that also comprise an
CC antigen selected from, for example, viruses, bacteria, parasites, tumour
CC cells and glycolipids. As such, these DNA oligos can be used in gene
CC therapy for inducing B-cell activation, treating, preventing or
CC ameliorating an immune system disorder or a tumoural disease including
CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
CC carcinoma. This oligonucleotide sequence is a non-CpG DNA oligo of the
CC invention.
XX
XX   Sequence 28 BP; 1 A; 1 C; 1 G; 25 T; 0 U; 0 Other;
SQ
XX
XX   Query Match 0.8%; Score 23.2; DB 1; Length 28;
XX Best Local Similarity 89.3%; Pred. No. 5.1e+02;
XX Matches 25; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2736
Db 28 AAAAAAAAAAAAAAAAAACAAATGAAAA 1

RESULT 313
ADG75972/c
ID   ADG75972 standard; DNA; 28 BP.
AC
AC   ADG75972;
XX
XX   11-MAR-2004 (first entry)
DT
XX
XX

```

```

XX
XX   Immunostimulatory non-CpG phosphorothioate DNA oligo IMT191.
XX
XX   ss; non-CpG; immunostimulatory; non-palindromic; immune response;
KW proliferation; differentiation; cytokine; antibody production; B-cell;
KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
KW renal cell carcinoma.
XX
XX   Synthetic.
OS
XX
XX   WO2003101375-A2.
PN
XX
XX   11-DEC-2003.
PD
XX
XX   30-MAY-2003; 2003WO-EP005691.
PF
XX
XX   30-MAY-2002; 2002CA-02388049.
PR
XX
XX   (IMMU-) IMMUNOTECH SA.
PA
XX
XX   Lopez RA;
PI
XX
XX   WPI; 2004-053333/05.
DR
XX
XX   New immunostimulatory oligonucleotide comprising non-palindromic nucleic
PT acid sequence motif, useful for inducing B-cell activation, treating,
PT preventing or ameliorating immune system disorder or tumoral disease e.g.
PT melanoma.
XX
XX   Example 5; Page 70; 139pp; English.
XX
XX   This invention relates to novel immunostimulatory oligonucleotides that
CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
CC oligonucleotides (without a CpG motif), which can stimulate an immune
CC response in animals of the order of primate, including humans. The immune
CC response is characterised by the proliferation, differentiation, cytokine
CC and antibody production in B-cells, as well as cell differentiation and
CC cytokine production in plasmacytoid dendritic cells. The present
CC invention describes immunomodulator compositions that also comprise an
CC antigen selected from, for example, viruses, bacteria, parasites, tumour
CC cells and glycolipids. As such, these DNA oligos can be used in gene
CC therapy for inducing B-cell activation, treating, preventing or
CC ameliorating an immune system disorder or a tumoural disease including
CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
CC carcinoma. This oligonucleotide sequence is an immunostimulatory
CC phosphorothioate non-CpG variant DNA oligo, used to determine the effect
CC of oligo size on B cell proliferation and IL6 secretion in an
CC exemplification of the invention. NOTE: This sequence is referred to as
CC SeqID 77 in example 5 of the specification, this differs from that given
CC as SeqID 77 in claim 14.
XX
XX   Sequence 28 BP; 1 A; 1 C; 1 G; 25 T; 0 U; 0 Other;
SQ
XX
XX   Query Match 0.8%; Score 23.2; DB 1; Length 28;
XX Best Local Similarity 89.3%; Pred. No. 5.1e+02;
XX Matches 25; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2736
Db 28 AAAAAAAAAAAAAAAAAACAAATGAAAA 1

RESULT 314
AAC62450/c
ID   AAC62450 standard; DNA; 23 BP.
XX
XX   AAC62450;
AC
XX
XX   07-FEB-2001 (first entry)
DT
XX
XX   Cleavage of nucleic acids from solid supports assay oligonucleotide #1.
DE
XX

```


CC detecting the presence or absence of a gene mutation, or variant gene,
 CC and for single nucleotide polymorphism analysis. The present DNA sequence
 CC was shown in a figure exemplifying the method of the invention.

XX Sequence 23 BP; 23 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 4.7e+02;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 23

RESULT 317
 ADT55098/c
 ID ADT55098 standard; DNA; 23 BP.
 XX
 AC ADT55098;
 XX
 DT 13-JAN-2005 (first entry)
 XX
 DE Electrophoresis apparatus-related DNA sequence #6.
 XX
 KW electrophoresis apparatus; variant gene isolation;
 KW gene mutation detection; variant gene detection;
 KW single nucleotide polymorphism analysis; SNP detection; ss.
 XX
 OS Unidentified.

XX JP2004298001-A.
 XX
 XX 28-OCT-2004.
 XX
 PF 28-MAR-2003; 2003JP-00091194.
 XX
 PR 28-MAR-2003; 2003JP-00091194.
 XX
 PA (MATU) MATSUSHITA DENKI SANGYO KK.
 XX
 XX WPI; 2004-760825/75.

XX Electrophoresis apparatus useful for isolating variant gene, comprises
 PT heating apparatus, and sealed flow path comprising linear polymer and DNA
 PT joint controlling agent, with DNA conjugates for separation, purification
 PT and assay.

XX Disclosure; Fig 4; 2lpp; Japanese.

XX The invention comprises an electrophoresis apparatus for isolating
 CC variant genes. The apparatus consists of: a sealed flow path filled with
 CC buffer containing linear polymer and DNA joint controlling agent, and
 CC containing DNA conjugate for separation, DNA conjugate for purification,
 CC and DNA conjugate for assay; and a heating apparatus for heating the
 CC portion of sealed flow path in which the DNA conjugate for assay is
 CC fixed. The electrophoresis apparatus is useful for isolating a variant
 CC gene. The electrophoresis apparatus is also useful in gene diagnosis for
 CC detecting the presence or absence of a gene mutation, or variant gene,
 CC and for single nucleotide polymorphism analysis. The present DNA sequence
 CC was shown in a figure exemplifying the method of the invention.

XX Sequence 23 BP; 0 A; 0 C; 0 G; 23 T; 0 U; 0 Other;

Query Match 0.8%; Score 23; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 4.7e+02;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
 |||||
 Db 23 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 318
 ADG16129/c
 ID ADG16129 standard; DNA; 24 BP.
 XX
 AC ADG16129;
 XX
 DT 26-FEB-2004 (first entry)
 XX
 DE Compound activity characterisation-related oligonucleotide SeqID4.
 XX
 KW compound activity characterisation; cellular activity;
 KW phenotypic attribute; candidate medicine; candidate treatment;
 KW multiple biological descriptor; cell marker; ss.
 XX
 OS Unidentified.

XX WO200181895-A2.
 XX
 PD 01-NOV-2001.
 XX
 PF 24-APR-2001; 2001WO-US013248.
 XX
 PR 26-APR-2000; 2000US-0199778P.
 PR 20-FEB-2001; 2001US-00790214.
 XX
 PA (CYTO-) CYTOKINETICS INC.
 XX
 PI Oestreicher DR, Sabry JH, Adams CL, Vaisberg EA, Crompton AM;
 XX
 DR WPI; 2002-041423/05.

XX Characterizing cellular activity of compound, by receiving images of
 PT cells with known activity and images of cells treated with compound,
 PT characterizing phenotypic attributes of images and comparing the
 PT phenotypes.

XX Disclosure; Fig 18; 139pp; English.

XX This invention relates to a novel method for the characterisation of the
 CC activity of a compound on cell. The method involves receiving images of
 CC cells with a cellular activity and images of other cells treated with the
 CC compound, quantitatively characterising phenotypic attributes of the
 CC image of cells with a cellular activity to produce a target phenotype for
 CC the cellular activity and that of the image of other cells to produce a
 CC second phenotype for the compound, and comparing the two phenotypes to
 CC determine whether the compound possesses cellular activity. The invention
 CC may be useful for characterising cellular activity of a compound, for
 CC determining information about properties of substances based upon the
 CC information about structure of living or non-living cells exposed to
 CC substances. The invention is also useful for identifying promising
 CC candidates in a search for new and better medicines and treatments using
 CC multiple biological descriptors from a single cell markers or components.

XX Sequence 24 BP; 0 A; 1 C; 0 G; 23 T; 0 U; 0 Other;

Query Match 0.8%; Score 23; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 4.8e+02;
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
 |||||
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 319
 ABX79809/c
 ID ABX79809 standard; cDNA; 24 BP.
 XX
 AC ABX79809;
 XX
 DT 17-APR-2003 (first entry)
 XX
 DE EST polymorphic DNA repeat polynucleotide #134.

```

XX EST; expressed sequence tag; ss; polymorphic repeat; tandem repeat;
KW polymorphic marker prediction of ubiquitous simple sequences; POMPOUS;
KW Rep-X; human; genetic disease; drug-treatment; Machado-Joseph;
KW Haw River syndrome; Huntington's disease; fragile-X syndrome;
KW Friedrich's ataxia; myotonic dystrophy; hyperandrogenaemia;
KW spinal atrophy; bulbar atrophy; spinocerebellar ataxia.
XX
OS Homo sapiens.
XX
XX US6472154-B1.
XX
XX 29-OCT-2002.
XX
XX 31-DEC-1999; 99US-00475947.
XX
XX 31-DEC-1999; 99US-00475947.
XX
XX (TEXA ) UNIV TEXAS SYSTEM.
XX
XX Garner HR, Wren JD, Minna JD, Fondon JW;
XX
XX WPI; 2003-208818/20.
XX
XX Identifying a candidate polymorphic repeat within a coding sequence, for
PT understanding or treating genetic disease, comprises detecting tandem
PT repeats in a target coding sequence and scoring the repeats for
PT polymorphic probability.
XX
XX Example; Col 579; 588pp; English.
XX
XX The invention discloses a method for identifying a candidate polymorphic
CC repeat within a coding sequence (expressed sequence tag, EST), which
CC comprises detecting tandem repeats in a target coding sequence, scoring
CC the repeats for polymorphic probability and generating a dataset
CC correlating the repeats with polymorphic probability to identify a
CC candidate polymorphic repeat. The computational methods (polymorphic
CC marker prediction of ubiquitous simple sequences, POMPOUS, and Rep-X) are
CC useful for identifying and detecting candidate polymorphic repeats in
CC human genes, which can be used to understand, treat or eliminate genetic
CC diseases, predispositions or adverse drug-treatment reactions. Examples
CC of diseases linked to nucleotide repeats are Machado-Joseph, Haw River
CC syndrome, Huntington's disease, fragile-X syndrome, Friedrich's ataxia,
CC myotonic dystrophy, hyperandrogenaemia, spinal and bulbar atrophy and
CC spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are
CC the polymorphic repeats identified for a search of human ESTs
XX
XX Sequence 24 BP; 0 A; 1 C; 0 G; 23 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 23; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. NO. 4.8e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 23 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 320
ADF12405
ID ADF12405 standard; DNA; 24 BP.
XX
XX ADF12405;
XX
XX 12-FEB-2004 (first entry)
XX
XX L1 retrotransposon insertion characterisation primer seq id 151.
XX
XX gene therapy; insertional mutation; germ line specific promoter;
KW mutation generation; transgenic animal; poly A element; non-LTR;
KW retrotransposon; long terminal repeats; human; primer; ss.
XX
XX Homo sapiens.
OS

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XX US2003121063-A1.
XX
XX 26-JUN-2003.
XX
XX 09-AUG-2002; 2002US-00216122.
XX
XX 16-NOV-1995; 95US-0006831P.
XX
XX 15-NOV-1996; 96US-00749805.
XX
XX 28-APR-1997; 97US-00847844.
XX
XX 01-SEP-2000; 2000US-00653812.
XX
XX (UYPE-) UNIV PENNSYLVANIA.
XX
XX Kazazian HH, Osterlag E, Deberardinis R;
XX
XX WPI; 2003-863454/80.
XX
XX Creating an insertional mutation in the germ line of an animal, useful
PT for generating a mutation in an offspring of an animal, comprises
PT introducing into an animal a nucleic acid molecule comprising a germ line
PT specific promoter.
XX
XX Example 4; SEQ ID NO 151; 102pp; English.
XX
XX The invention describes a method of creating an insertional mutation in
CC the germ line of an animal by introducing into an animal a nucleic acid
CC molecule comprising a germ line specific promoter. The method is useful
CC for generating a mutation in an offspring of an animal, or for isolating
CC a nucleic acid from a genome of an offspring of an animal. The method may
CC also be used to correct genetic defects in animals, especially humans.
CC The nucleic acid is useful for generating mutations in a cell for
CC assessing the frequency with which selected cells under go insertional
CC mutagenesis for the generation of transgenic animals. This sequence
CC represents a primer used to characterise the insertion site of the
CC L1/enhanced green fluorescent protein (EGFP) retrotransposon cassette
CC into the mouse genome.
XX
XX Sequence 24 BP; 23 A; 0 C; 0 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 23; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. NO. 4.8e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 1 AAAAAAAAAAAAAAAAAAAAAA 23

RESULT 321
AAH38515/C
ID AAH38515 standard; DNA; 25 BP.
XX
XX AAH38515;
XX
XX 14-AUG-2001 (first entry)
XX
XX SNP specific SNPE primer SEQ ID 1311.
XX
XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;
KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
KW Leisch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
KW inflammation; forensic investigation; paternity analysis; primer; ss.
XX
XX Homo sapiens.
XX
XX WO200129262-A2.
XX
XX 26-APR-2001.
XX
XX 13-OCT-2000; 2000WO-US028436.
XX

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XX PR 15-OCT-1999; 99US-0160096P.
XX PA (ORCH-) ORCHID BIOSCIENCES INC.
XX PI Picoult-Newburg L, Pohl M;
XX DR WPI; 2001-290930/30.
XX PT New genotyping oligonucleotide, useful for detecting the presence,
XX PT absence or identity of single polynucleotide polymorphism in a nucleic
XX PT acid sample.
XX PS Claim 1; Page 56; 83pp; English.
XX CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
XX CC primer extension (SNPE) primers, and the sequences of regions flanking
XX CC sites of single nucleotide polymorphisms SNPs. The present invention
XX CC includes kits for determining the presence or absence of a SNP, using the
XX CC oligonucleotides of the invention. The PCR primers are used to amplify a
XX CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.
XX CC The oligonucleotides are useful for genotyping a nucleic acid sample by
XX CC performing a single-nucleotide primer extension reaction. The
XX CC oligonucleotides are useful for determining the presence, absence or
XX CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
XX CC assess by association analysis the genotype of an individual or group of
XX CC individuals, having a pathological phenotypic trait suspected of being
XX CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
XX CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
XX CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
XX CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
XX CC traits also include symptoms of or susceptibility to multifactorial
XX CC disease of which a component is or may be genetic such as autoimmune
XX CC diseases, including, rheumatoid arthritis, multiple sclerosis,
XX CC inflammation, cancer, nervous system diseases and infection by pathogenic
XX CC microorganism. The method is also useful in forensic investigations and
XX CC paternity analysis. The present sequence represents a single nucleotide
XX CC primer extension (SNPE) primer specific for a human SNP containing DNA
XX CC sequence
XX SQ Sequence 25 BP; 1 A; 1 C; 0 G; 23 T; 0 U; 0 Other;

Query Match 0.8%; Score 23; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 4.9e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 25 AAAAAAAAAAAAAAAAAAAAAA 3

RESULT 322
AAS11744
ID AAS11744 standard; DNA; 28 BP.
AC AAS11744;
XX 24-OCT-2001 (first entry)
XX DE Human haemoglobin alpha 2 transcript (extreme 3' end).
XX KW Peptide-based cDNA characterisation; haemoglobin alpha 2; human; ds.
XX OS Homo sapiens.
XX PN WQ200161051-A1.
XX PD 23-AUG-2001.
XX PF 16-FEB-2001; 2001WO-US005305.
XX PR 16-FEB-2000; 2000US-0182983P.
XX

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PA (SEQU-) SEQUEL GENETICS INC.
XX Jarvik JW;
XX WPI; 2001-514778/56.
XX Transcript, genetic, and especially nucleic acid sequence analysis
XX PT comprises analysis of hybrid peptide products.
XX PS Example 11; Page 30; 48pp; English.
XX CC The invention relates to a method of peptide-based transcript or genetic
XX CC analysis comprising: (a) providing multiple polynucleotides (I) derived
XX CC from mRNAs from a biological sample, where (I) has homology to a known
XX CC reference sequence (II); (b) expressing (I); and (c) assessing a physical
XX CC property of the expression products to determine the sequences of (I) by
XX CC comparison with the predicted properties of polypeptides encoded by (II).
XX CC The method is useful for transcript or genetic analysis, especially
XX CC nucleic acid analysis where the method comprises expressing polypeptides
XX CC from two or more reading frames and determining the masses to create a
XX CC peptide mass signature characteristic of the nucleic acid molecule. The
XX CC peptide is considerably smaller than the DNA molecule that encodes it
XX CC (individual amino acids averages about 110 Daltons each whereas the
XX CC trinucleotides (triplets) that encode them average N Daltons each). Also,
XX CC the peptides are much more diverse in composition than nucleic acids, as
XX CC they are composed of combinations of 20 different amino acids instead of
XX CC combinations of 4 different nucleotides, e.g., two random DNA fragments
XX CC of identical composition (e.g., with 10 adenines, 10 thymines, 15
XX CC guanines, and 15 cytosines) are extremely unlikely to encode peptides of
XX CC identical composition. This means that whereas the two nucleic acids have
XX CC identical masses and cannot be distinguished on the basis of mass, the
XX CC peptides that they encode will, except in statistically very rare cases,
XX CC have different masses and can be readily distinguished in the basis of
XX CC mass. The present sequence represents the coding sequence of human
XX CC haemoglobin alpha 2 transcript (extreme 3' end) used in an example to
XX CC demonstrate the method of the invention
XX SQ Sequence 28 BP; 23 A; 2 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 23; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 5.2e+02;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 6 AAAAAAAAAAAAAAAAAAAAAA 28

RESULT 323
AAT93819/C
ID AAT93819 standard; DNA; 26 BP.
XX AAT93819;
XX AC AAT93819;
XX DT 25-MAR-2003 (revised)
XX DT 24-FEB-1998 (first entry)
XX DE Antitumoural phosphodiester oligonucleotide 9 with cytotoxic activity.
XX KW Phosphodiester; selective binding; cell viability; growth;
XX KW tumoural cell line; cytotoxic activity; tumour cell; lymphoma;
XX KW lymphoblastic tumour; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..26
XX FT /*tag= a
XX FT /note= "phosphodiester oligonucleotide"
XX PN WQ9720924-A1.
XX PD 12-JUN-1997.

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XX PF 04-DEC-1996; 96WO-EP005388.
XX PR 04-DEC-1995; 95IT-MI002539.
XX PA (SAIC-) SAICOM SRL.
XX PI Scaggiante B, Quadrifoglio F;
XX WPI; 1997-319771/29.
XX New phosphodiesteric oligonucleotide(s) - which exert a specific and
PT selective cytotoxic effect on tumour cells, for treating both solid and
PT liquid tumours.
XX Claim 10; Page 5; 38pp; English.
XX Novel phosphodiesteric oligonucleotides AAT93811-27 are based on the
CC generic formula, in the 3'-5' or 5'-3' direction: (Gata')a''-(Gbtb')b''-
CC (Gctc')c''-(Gdtd')d''-(Gftr')e''-(Gffr')f''-(Ggtg')g''-N', where: N and
CC N' = T or G, equal or different from each other; x = 0-8, equal or
CC different from each other; a, b, c, d, e, f, and g = 0-10, equal or
CC different from each other; a', b', c', d', e', f', and g' = 0-30, equal
CC or different from each other; a'', b'', c'', d'', e'', f'', and g'' = 1-
CC 16, equal or different from each other; The oligonucleotides are believed
CC to selectively bind and sequester some proteins which are essential to
CC the viability and growth of tumoural cell line. They have specific and
CC selective cytotoxic activity against tumour cells, and can be used for
CC treating tumours of the liquid type, in particular of lymphoblastic
CC origin, and of solid type, in particular lymphomas. The present
CC phosphodiester oligonucleotide, at a concentration of 15 micromolar,
CC reduced growth of CCRF-CEM tumoural cells by 76%, which is detectable 48
CC hours after administration. (Updated on 25-MAR-2003 to correct PR field.)
XX
SQ Sequence 26 BP; 0 A; 0 C; 2 G; 24 T; 0 U; 0 Other;
Query Match 0.8%; Score 22.8; DB 1; Length 26;
Best Local Similarity 92.3%; Pred. No. 5.2e+02;
Matches 24; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAAAAAA 2734
DB 26 AAAAAAAAAAAAAAAAAACAAAAAAAAA 1
RESULT 324
ADG16126/c
ID ADG16126 standard; DNA; 24 BP.
XX AC ADG16126;
XX 26-FEB-2004 (first entry)
XX Compound activity characterisation-related oligonucleotide SeqID1.
XX compound activity characterisation; cellular activity;
KW phenotypic attribute; candidate medicine; candidate treatment;
KW multiple biological descriptor; cell marker; ss.
XX Unidentified.
XX WO200181995-A2.
XX 01-NOV-2001.
XX 24-APR-2001; 2001WO-US013248.
XX 26-APR-2000; 2000US-0199778P.
PR 20-FEB-2001; 2001US-00790214.
XX (CYTO-) CYTOKINETICS INC.
XX Oestreicher DR, Sabry JH, Adams CL, Vaisberg EA, Crompton AM;
PI

XX WPI; 2002-041423/05.
XX Characterizing cellular activity of compound, by receiving images of
PT cells with known activity and images of cells treated with compound,
PT characterizing phenotypic attributes of images and comparing the
PT phenotypes.
XX Disclosure; Fig 18; 139pp; English.
XX This invention relates to a novel method for the characterisation of the
CC activity of a compound on cell. The method involves receiving images of
CC cells with a cellular activity and images of other cells treated with the
CC compound, quantitatively characterising phenotypic attributes of the
CC image of cells with a cellular activity to produce a target phenotype for
CC the cellular activity and that of the image of other cells to produce a
CC second phenotype for the compound, and comparing the two phenotypes to
CC determine whether the compound possesses cellular activity. The invention
CC may be useful for characterising cellular activity of a compound, for
CC determining information about properties of substances based upon the
CC information about structure of living or non-living cells exposed to
CC substances. The invention is also useful for identifying promising
CC candidates in a search for new and better medicines and treatments using
CC multiple biological descriptors from a single cell markers or components.
XX Sequence 24 BP; 1 A; 0 C; 0 G; 23 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 22.4; DB 1; Length 24;
Best Local Similarity 95.8%; Pred. No. 5.3e+02;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2729
DB 24 AATAAAAAAAAAAAAAAAAAAAAAA 1
RESULT 325
AED81269/c
ID AED81269 standard; DNA; 24 BP.
XX AC AED81269;
XX 26-JAN-2006 (first entry)
XX IL-10 expression assay, test oligonucleotide SEQ ID No:27.
XX pharmaceutical; therapeutic; immune stimulation; immune response;
KW allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
KW immunosuppressive; phosphorothioate; ss.
XX Synthetic.
XX WO2005111057-A2.
XX 24-NOV-2005.
XX 04-APR-2005; 2005WO-US011827.
XX 02-APR-2004; 2004US-0558951P.
XX (COLE-) COLEY PHARM GROUP INC.
PA (COLE-) COLEY PHARM GMBH.
XX Krieg AM, Vollmer J;
PI WPI; 2005-786756/80.
XX New oligonucleotides, useful for treating an allergy or asthma, or an
PT autoimmune disease, arthritis, systemic lupus erythematosus, multiple
PT sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
XX Example; SEQ ID NO 27; 111pp; English.
XX

The invention relates to an oligonucleotide having the formula: (a) 5' XN1YN2 3' where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3' end of the oligonucleotide, where X is a T or modified T nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G nucleotide, and N1 and N2 are polynucleotides that do not include a CG dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3' polynucleotide consisting of the YZ dinucleotide and the N2 polynucleotide contains a number of nucleotides that is at most 45% of the number of nucleotides in the oligonucleotide; and (b) 5' XN1YN2 3' where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3' end of the oligonucleotide, where X is a T or modified T nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a polynucleotide of 5-10 nucleotides, where N1 does not include a CG dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a pharmaceutical composition comprising the oligonucleotide in combination with a therapeutic agent selected from chemotherapeutic agents, radiotherapeutic agents, monoclonal antibodies, and anticancer agents; (2) a method of specifically increasing interleukin (IL)-10 expression relative to interferon (IFN)-alpha expression in a subject, comprising administering an oligonucleotide or a pharmaceutical composition to the subject in need of increased IL-10 expression relative to IFN-alpha expression; (3) a method of inducing an antigen-specific regulatory T cell response in a subject by administering an immunostimulatory nucleic acid or composition to a subject exposed to an antigen; (5) a method of treating an allergy or asthma by exposing a subject to an allergen, and administering an immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or treat an autoimmune disease in the subject; and (7) a method of reducing an antigen-specific response to an implant in a subject by exposing a subject to an implant antigen, and administering an immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or reduce an antigen-specific response to the implant in the subject. The oligonucleotide includes at least 1 modified internucleotide linkage such as a phosphorothioate linkage. The oligonucleotide, methods and compositions of the invention are useful for treating allergies, asthma, autoimmune diseases, arthritis, systemic lupus erythematosus, multiple sclerosis, Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia, temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's disease, ulcerative colitis, primary biliary cirrhosis, autoimmune hepatitis, immune-mediated diabetes mellitus, Grave's disease, Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune disease of the adrenal gland, rheumatoid arthritis, scleroderma, polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by an infection e.g. Lyme disease. This sequence represents an oligonucleotide used in experiments in the examples of the present invention.

SQ Sequence 24 BP; 0 A; 1 C; 0 G; 23 T; 0 U; 0 Other;
 Query Match 0.8%; Score 22.4; DB 1; Length 24;
 Best Local Similarity 95.8%; Pred. No. 5.3e+02;
 Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 |||||
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 326
 AAD34264

ID AAD34264 standard; DNA; 25 BP.

XX AAD34264;

AC AAD34264;

XX 16-JUL-2002 (first entry)

DE Human CYP2D6 gene polymorphic site 385 detecting sense 5' oligo.

XX Human; cytochrome P450 2D6; CYP2D6; enzyme; detection; xenobiotic;

KW ligase-based sequenced determination; drug metabolism; chromosome 22; ss.

XX Homo sapiens.

OS WO200218638-A2.

XX 07-MAR-2002.

XX 27-AUG-2001; 2001WO-1B001544.

XX 30-AUG-2000; 2000GB-00021286.

XX (GEMI-) GEMINI GENOMICS PLC.

PI Risinger C, Andersson MK, Lewander T, Oliasson E;

XX WPI; 2002-329785/36.

XX New sequence determination oligonucleotides, useful for detecting

PT polymorphic sites in a 5' flanking region of a CYP2D6 gene, as

PT hybridization probes, as components of diagnostic assays, or in ligase-

PT based sequence determination.

PS Claim 2; Page 23; 63pp; English.

CC The invention relates to sequence determination oligonucleotides for
 CC detecting polymorphic sites in a 5' flanking region of cytochrome P450
 CC 2D6 (CYP2D6) gene. CYP2D6 enzymes are involved in the metabolism of many
 CC different xenobiotics. Human CYP2D6 gene is located on chromosome 22. The
 CC oligonucleotides may be used as in situ hybridisation probes, in ligase-
 CC based sequence determination, as components of diagnostic assays, as
 CC probes in sequence determination methods based on mismatches, as
 CC hybridisation-based diagnostic assays, and as components of diagnostic
 CC microarray. CYP2D6 is useful to predict variations in an individual's
 CC ability to metabolise certain drugs. The present sequence is a sense
 CC oligonucleotide used for detecting of human CYP2D6 gene 5' flanking
 CC region single nucleotide polymorphism (SNP)

XX SQ Sequence 25 BP; 22 A; 2 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 22.4; DB 1; Length 25;

Best Local Similarity 95.8%; Pred. No. 5.4e+02;

Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAAAAAA 2730

Db 1 CCAAAAAAAAAAAAAAAAAAAAAA 24

RESULT 327

AAL57030/c

ID AAL57030 standard; DNA; 23 BP.

XX AAL57030;

XX 11-MAR-2004 (first entry)

DE Murine VE-PTP coding sequence PCR primer #2.

XX Vascular endothelial protein-tyrosine phosphatase; VE-PTP; mouse; human;

KW gene therapy; cytostatic; VE-cadherin; PCR; primer; ss;

KW vascular endothelial-cadherin.

```

XX OS Mus sp.
XX PN WO2003084565-A2.
XX PD 16-OCT-2003.
XX XX
XX PF 08-APR-2003; 2003WO-EP003645.
XX XX
XX PR 08-APR-2002; 2002EP-00007837.
XX XX
XX PA (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
XX XX
XX PI Nawroth R, Deutsch U, Vestweber D, Shima DT, Golding M;
XX XX
XX DR WPI; 2003-804251/75.
XX XX
XX PT Use of the polypeptide comprising vascular endothelial-protein tyrosine
XX PT phosphatase (VE-PTP) or the nucleic acid encoding the polypeptide for the
XX PT manufacture of an agent for monitoring or modulating VE-cadherin mediated
XX PT disorders.
XX XX
XX PS Example; Page 17; Opp; English.
XX XX
XX CC The present invention relates to a polypeptide comprising vascular
XX CC endothelial-protein tyrosine phosphatase (VE-PTP) or its active fragment
XX CC or effector, or the nucleic acid encoding the polypeptide or its
XX CC effector, for use in the manufacture of an agent for monitoring or
XX CC modulating VE-cadherin mediated processes or disorders. The polypeptide
XX CC comprising vascular endothelial-protein tyrosine phosphatase (VE-PTP) or
XX CC its active fragment or effector, or the nucleic acid encoding the
XX CC polypeptide or its effector, is useful for the manufacture of an agent
XX CC for monitoring or modulating VE-cadherin mediated processes or disorders,
XX CC e.g., cancer. The present sequence is a PCR primer shown in the
XX CC exemplification of the invention
XX XX
XX SQ Sequence 23 BP; 0 A; 0 C; 0 G; 22 T; 0 U; 1 Other;

Query Match 0.8%; Score 22.2; DB 1; Length 23;
Best Local Similarity 95.7%; Pred. No. 5.3e+02;
Matches 22; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2730
DB 23 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 328
AAQ64724
ID AAQ64724 standard; cDNA to mRNA; 22 BP.
XX AC AAQ64724;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 04-JAN-1995 (first entry)
XX XX
XX DE 2',5'-linked tetraadenylate-anti(dT)18 oligonucleotide chimeric mol.
XX XX
XX KW antisense; 2',5'-tetraadenylate; 2-5A dependent RNase activator;
XX KW RNA cleavage; antiviral therapy; chimeric molecule; PKR;
XX KW protein synthesis regulation; phosphorylation; eIF-2alpha;
XX KW eukaryotic translation initiation factor; ss.
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
XX FT misc_feature 1..4
XX FT /tag= a
XX FT /label= 2',5'-linked tetraadenylate
XX FT /notes= "nucleotides linked through phosphodiester bonds
XX FT at hydroxyl groups of 2' and 5' carbons"
XX FT 4..5
XX FT misc_feature
XX FT /tag= b

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FT /note= "the 2-5A moiety (*tag = a) and the antisense DNA
FT sequence (*tag = c) are linked by two 1,4-butanediol
FT molecules linked through phosphodiester bonds"
FT 5..22
FT /tag= c
FT /note= "antisense region, complementary to oligo dT"
XX PN WO9409129-A2.
XX XX
XX PD 28-APR-1994.
XX XX
XX PF 20-OCT-1993; 93WO-US010103.
XX XX
XX PR 21-OCT-1992; 92US-00965666.
XX PR 17-SEP-1993; 93US-00123449.
XX XX
XX PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX PA (CLEV-) CLEVELAND CLINIC RES INST.
XX PI Torrence P, Silverman R, Maitra R, Lesiak K;
XX XX
XX DR WPI; 1994-151315/18.
XX XX
XX PT Specific cleavage of RNA, useful partic. for treating viral infection,
XX PT cancers, etc. - by using anti-sense oligo:nucleotide coupled to activator
XX PT of 2-5A dependent RNase.
XX PS Example 9; Page 66; 86pp; English.
XX XX
XX CC This sequence was used to determine whether 2-5A-antisense chimeric
XX CC molecules are inhibitory to cell growth. The molecules AAQ64709, AAQ64711
XX CC and AAQ64724 all lacked cytotoxicity. In the novel 2-5A-antisense
XX CC oligonucleotide chimeric molecules, the antisense region targets the
XX CC chimeric molecule to a particular region of RNA to be specifically
XX CC cleaved and the 2',5'-linked tetraadenylate tail activates the 2-5A
XX CC RNase. Typical applications are treatment of viral infections (esp. for
XX CC cleavage of an RNA virus genome), cancer; leukaemia, cardiovascular
XX CC disorders (e.g. restenosis after angioplasty), genetic disorders,
XX CC osteoarthritis or rheumatoid arthritis. (Updated on 25-MAR-2003 to
XX CC correct FN field.)
XX XX
XX SQ Sequence 22 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 5.4e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
DB 1 AAAAAAAAAAAAAAAAAAAAAA 22

RESULT 329
AAF17413
ID AAF17413 standard; DNA; 22 BP.
XX AC AAF17413;
XX XX
XX DT 09-MAR-2001 (first entry)
XX XX
XX DE L1 cleavage site related sequence #3.
XX XX
XX KW Retrotransposon; genetic defect; cystic fibrosis; da.
XX OS Unidentified.
XX XX
XX PN US6150160-A.
XX XX
XX PD 21-NOV-2000.
XX XX
XX PF 28-APR-1997; 97US-00847844.
XX XX
XX PR 16-NOV-1995; 95US-0006831P.

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PR 15-NOV-1996; 96US-00749805.
XX (UYJO ) UNIV JOHNS HOPKINS.
PA (UYPE-) UNIV PENNSYLVANIA.
XX
XX Moran JV, Dombroski BA, Kazanian HH, Boeke JD;
XX WPI; 2001-060015/07.
XX
XX DNAC comprising a promoter P and an L1 cassette sequence having a core
XX retrotransposon element, useful for random insertion of a heterologous or
XX homologous DNA sequence into a cell genome and for correcting genetic
XX defects.
XX
XX Disclosure; Fig 14; 87pp; English.
XX
XX The present invention relates to DNA for a promoter and an L1 cassette
XX sequence having a core retrotransposon element. The invention is useful
XX for random insertion of a heterologous or homologous DNA sequence into a
XX cell genome, and for correction of a genetic defect in the cell into a
XX which the insertion is made. Genetic defects which may be corrected
XX includes cystic fibrosis, mutations in the dystrophin gene, genetic
XX defects associated with blood clotting and other genetic defects
XX
XX Sequence 22 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 5.4e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
Db 1 AAAAAAAAAAAAAAAAAAAAAA 22
RESULT 330
ADFI2348
ID ADFI2348 standard; DNA; 22 BP.
XX
XX AC ADFI2348;
XX
XX 12-FEB-2004 (first entry)
XX
XX L1 retrotransposon endonuclease cleavage site seq id 94.
XX
XX gene therapy; insertional mutation; germ line specific promoter;
XX mutation generation; transgenic animal; poly A element; non-LTE;
XX retrotransposon; long terminal repeats; L1; EN domain; endonuclease;
XX cleavage site; ds.
XX
XX Homo sapiens.
XX
XX US2003121063-A1.
XX
XX 26-JUN-2003.
XX
XX 09-AUG-2002; 2002US-00216122.
XX
XX 16-NOV-1995; 95US-0006831P.
XX 15-NOV-1996; 96US-00749805.
XX 28-APR-1997; 97US-00847844.
XX 01-SEP-2000; 2000US-00653812.
XX
XX (UYPE-) UNIV PENNSYLVANIA.
XX
XX Kazanian HH, Ostertag E, Deberardinis R;
XX WPI; 2003-863454/80.
XX
XX Creating an insertional mutation in the germ line of an animal, useful
XX for generating a mutation in an offspring of an animal, comprises
XX introducing into an animal a nucleic acid molecule comprising a germ line
XX specific promoter.

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XX Example 2; SEQ ID NO 94; 102pp; English.
XX
XX The invention describes a method of creating an insertional mutation in
XX the germ line of an animal by introducing into an animal a nucleic acid
XX molecule comprising a germ line specific promoter. The method is useful
XX for generating a mutation in an offspring of an animal, or for isolating
XX a nucleic acid from a genome of an offspring of an animal. The method may
XX also be used to correct genetic defects in animals, especially humans.
XX The nucleic acid is useful for generating mutations in a cell for
XX assessing the frequency with which selected cells under go insertional
XX mutagenesis for the generation of transgenic animals. This sequence
XX represents an exemplary cleavage site of the endonuclease encoded by
XX human L1 retrotransposon EN domain.
XX
XX Sequence 22 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 5.4e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
Db 1 AAAAAAAAAAAAAAAAAAAAAA 22
RESULT 331
ADQ25630/c
ID ADQ25630 standard; cDNA; 22 BP.
XX
XX AC ADQ25630;
XX
XX 23-SEP-2004 (first entry)
XX
XX Junction-specific poly(A) cDNA primer.
XX
XX Cystic fibrosis; muscular dystrophy; diabetes; gene discovery;
XX gene mapping; molecular haplotyping; agricultural research;
XX prostate cancer; breast cancer; lung cancer; colon cancer;
XX ovarian cancer; human; adenorectal carcinoma; primer; ss.
XX
XX Unidentified.
XX
XX US2004126770-A1.
XX
XX 01-JUL-2004.
XX
XX 31-DEC-2002; 2002US-00335573.
XX
XX 31-DEC-2002; 2002US-00335573.
XX
XX (KUMA/) KUMAR G.
XX (ABAR/) ABARZUA P.
XX
XX Kumar G, Abarzua P;
XX WPI; 2004-499113/47.
XX
XX Amplifying RNA sequences, useful in detecting diseases or mutation,
XX comprises synthesizing first strand cDNA, circularizing first strand
XX cDNA, and replicating the circularized cDNA molecules by rolling circle
XX replication.
XX
XX Disclosure; SEQ ID NO 6; 64pp; English.
XX
XX The present invention relates to composition and method for amplifying
XX RNA sequences. The method involves synthesising first strand cDNA
XX molecules from RNA molecules, circularising the first strand and
XX replicating the circularised first strand cDNA molecules using rolling
XX circle replication. The method is useful for producing nucleic acid
XX molecules corresponding to RNA molecules in an RNA sample, for
XX identifying or analysing and comparing RNA molecules and or sequences
XX expressed in different cells, tissues and or samples. The invention is

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CC also useful in detecting disease (e.g. cystic fibrosis, muscular
 CC dystrophy or diabetes), mutation detection, gene discovery, gene mapping
 CC (molecular haplotyping), agricultural research, and assessment of
 CC predisposition for cancers, e.g. prostate, breast, lung, colon or ovarian
 CC cancer. The present sequence is a function-specific cDNA primer. This
 CC sequence is used to illustrate the method of invention.

XX Sequence 22 BP; 0 A; 0 C; 0 G; 22 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 22;
 Best Local Similarity 100.0%; Pred. No. 5.4e+02;
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
 Db 22 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 332
 AAQ30430/c
 ID AAQ30430 standard; DNA; 23 BP.

XX AC AAQ30430;

XX DT 25-MAR-2003 (revised)
 DT 07-DEC-1992 (first entry)

XX Oligomer IL6803 for forming triplex with HUMIL6 target duplex.

XX Human interleukin-6 gene; herpes simplex; AIDS; modified; HIV; RSV; HPV;
 KW malignancy; hepatitis; inflammation; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
 FT misc_feature 11..12
 FT /*tag= d
 FT /note= "o-xyloso dimer synthon linkage"
 FT misc_feature 12..23
 FT /*tag= c
 FT /label= inverted polarity_region
 FT /note= "see comments"
 FT modified_base 23
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"

XX WO9209705-A1.

XX PD 11-JUN-1992.

XX PF 25-NOV-1991; 91WO-US008811.

XX PR 23-NOV-1990; 90US-00617907.

XX PR 18-JAN-1991; 91US-00643382.

XX PR 08-APR-1991; 91US-00683420.

XX PR 17-APR-1991; 91US-00686544.

XX PR 17-APR-1991; 91US-00686546.

XX PR 17-APR-1991; 91US-00686547.

XX PR 27-SEP-1991; 91US-00766733.

XX PA (GILE-) GILEAD SCI INC.

XX XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;

XX WPI; 1992-217083/26.

XX New oligomers contg. modified bases - which form a triplex with G-C
 PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
 FT

PT herpes malignancy and inflammation.

XX Claim 12; Page 71; 77pp; English.

XX The synthetic oligomer is capable of forming a triplex at physiological
 CC pH with a purine rich target sequence by coupling into the major groove
 CC of the duplex. The specific target sequence of this oligomer is the human
 CC interleukin 6 gene untranslated sequence contg. a purine rich sequence
 CC concd. on one strand of the duplex. The oligomer, and others like it are
 CC useful in diagnosis and therapy of diseases characterized by specific DNA
 CC duplex targets, e.g. HPV, HER, HIV, hepatitis B, herpes, malignant
 CC tumours and inflammation. The triple helices form under mild conditions
 CC thus assays may be carried out without subjecting the test specimen to
 CC harsh conditions. The oligomer contains an inverted polarity region
 CC formed from an o-xyloso dimer synthon. The linking gp. is o-xyloso
 CC (nucleotides have the 3' positions of xylose sugars linked via the o-
 CC xylene ring). Two nucleotides are coupled through a xylene residue to
 CC form the dimer synthon. This additional modifications may render the
 CC oligomer stable to nuclease activity. The oligomer is able to inhibit
 CC gene expression, as verified by in vitro systems. See also AAQ25452-25501
 CC and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)

XX SQ Sequence 23 BP; 2 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 22; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 5.5e+02;
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2729
 Db 23 TAAAAAAAAAAAAAAAAAAAAA 2

RESULT 333

AAQ30431/c
 ID AAQ30431 standard; DNA; 23 BP.

XX AC AAQ30431;

XX DT 25-MAR-2003 (revised)

DT 07-DEC-1992 (first entry)

XX Oligomer IL6804 for forming triplex with HUMIL6 target duplex.

XX Human interleukin-6 gene; herpes simplex; AIDS; modified; HIV; RSV; HPV;
 KW malignancy; hepatitis; inflammation; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= N4 N4 ethanocytosine"
 FT misc_feature 11..12
 FT /*tag= d
 FT /note= "o-xyloso dimer synthon linkage"
 FT misc_feature 12..23
 FT /*tag= c
 FT /label= inverted polarity_region
 FT /note= "see comments"
 FT modified_base 23
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"

XX WO9209705-A1.

XX PD 11-JUN-1992.

XX PF 25-NOV-1991; 91WO-US008811.

XX PR 23-NOV-1990; 90US-00617907.

PR 18-JAN-1991; 91US-00643382.
 PR 08-APR-1991; 91US-00683420.
 PR 17-APR-1991; 91US-00686544.
 PR 17-APR-1991; 91US-00686546.
 PR 17-APR-1991; 91US-00686547.
 PR 27-SEP-1991; 91US-00766733.
 XX (GILE-) GILEAD SCI INC.
 PA Froehler B, Krawczyk S, Matteucci MD, Milligan J;
 XX WPI; 1992-217083/26.
 XX
 XX New oligomers contg. modified bases - which form a triplex with G-C
 PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
 PT herpes malignancy and inflammation.
 XX
 XX Claim 12; Page 71; 77pp; English.
 XX
 CC The synthetic oligomer is capable of forming a triplex at physiological
 CC pH with a purine rich target sequence by coupling into the major groove
 CC of the duplex. The specific target sequence of this oligomer is the human
 CC interleukin 6 gene untranslated sequence contg. a purine rich sequence
 CC concd. on one strand of the duplex. The oligomer, and others like it are
 CC useful in diagnosis and therapy of diseases characterised by specific DNA
 CC duplex targets, e.g. HPV, HER, HIV, hepatitis B, herpes, malignant
 CC tumours and inflammation. The triple helices form under mild conditions
 CC these assays may be carried out without subjecting the test specimen to
 CC harsh conditions. The oligomer contains an inverted polarity region
 CC formed from an o-xyloso dimer synthon. The linking gp. is o-xyloso
 CC (nucleotides have the 3'positions of xylose sugars linked via the o-
 CC xylene ring). Two nucleotides are coupled through a xylene residue to
 CC form the dimer synthon. This additional modifications may render the
 CC oligomer stable to nuclease activity. The oligomer is able to inhibit
 CC gene expression, as verified by in vitro systems. See also AAQ25452-25501
 CC and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 23 BP; 1 A; 1 C; 0 G; 21 T; 0 U; 0 Other;
 Query Match 0.8%; Score 22; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 5.5e+02;
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAA AAAAAAAAAAAAAAAAAA 2729
 Db 23 TAAAAA AAAAAAAAAAAAAAAAAA 2
 RESULT 334
 ABL01773
 ID ABL01773 standard; DNA; 23 BP.
 AC ABL01773;
 XX
 DT 18-MAR-2002 (first entry)
 XX
 DE Human MSH2 (hMSH2) intronic sequence SEQ ID NO:126.
 XX
 KW Human; MLH1; MSH2; hMLH1; hMSH2; variant gene; diagnosis; HNPCC;
 KW hereditary non-polyposis colorectal cancer; db.
 XX
 OS Homo sapiens.
 XX
 XX US2001044936-A1.
 PN
 XX
 PD 22-NOV-2001.
 XX
 XX 22-OCT-1999; 99US-00426548.
 PF
 XX
 XX 22-OCT-1998; 98US-0105180P.
 PR
 XX (ROBB/) ROBBINS D.
 PA (LING/) LIN-GOERKE J L.

PA (LING/) LING J C.
 XX Robbins D, Lin-Goerke JL, Ling JC;
 XX WPI; 2002-105577/14.
 DR
 XX New variants of the human MLH1 and MSH2 genes for diagnosing or
 PT determining a predisposition for hereditary non-polyposis colorectal
 PT cancer.
 XX
 PS Disclosure; Page 4; 38pp; English.
 XX
 CC The present invention describes a variant human MLH1 or MSH2 gene. Also
 CC described are: (1) a method for diagnosing or predicting susceptibility
 CC to hereditary non-polyposis colorectal cancer (HNPCC), comprising
 CC screening a DNA sample for the variant MLH1 or MSH2 gene where presence
 CC of the variant indicates presence of, or susceptibility to HNPCC; (2) a
 CC method of identifying mutants in splice donor or acceptor sites of a
 CC human MLH1 gene, comprising sequencing splice donor or acceptor sites of
 CC the gene with intronic primers for the human MLH1 gene and analysing the
 CC sequence to identify any mutants; (3) a method of identifying mutants in
 CC splice donor or acceptor sites of a human MSH2 gene, comprising
 CC sequencing splice donor or acceptor sites of the gene with intronic
 CC primers for the human MSH2 gene and analysing the sequence to identify
 CC any mutants; and (4) a transgenic model system for colorectal cancer
 CC comprising cells expressing the variant MLH1 or MSH2 gene. The hMLH1 and
 CC hMSH2 variants are used to diagnose or determine a patient's
 CC susceptibility to hereditary non-polyposis colorectal cancer. ABL01648 to
 CC ABL01745 and ABL01746 to ABL01831 represent hMLH1 and hMSH2 gene
 CC fragments from the present invention. ABL01832 to ABL01839 represent
 CC mutagenic primers used in the exemplification of the present invention
 XX
 SQ Sequence 23 BP; 21 A; 0 C; 1 G; 1 T; 0 U; 0 Other;
 Query Match 0.8%; Score 22; DB 1; Length 23;
 Best Local Similarity 100.0%; Pred. No. 5.5e+02;
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAA AAAAAAAAAAAAAAAAAA 2729
 Db 2 TAAAAA AAAAAAAAAAAAAAAAAA 23
 RESULT 335
 ADY85941/c
 ID ADY85941 standard; DNA; 24 BP.
 XX
 AC ADY85941;
 XX
 DT 02-JUN-2005 (first entry)
 XX
 DE RT-PCR primer used for cDNA synthesis from scorpion toxin RNA Seq 285.
 XX
 KW RT-PCR; ss; toxin; immunogenicity; antigen; antibody production; venom;
 KW vaccine; diagnosis; primer; reverse transcriptase PCR.
 XX
 OS Synthetic.
 XX
 XX US2005065331-A1.
 PN
 XX 24-MAR-2005.
 PD
 XX 26-NOV-2003; 2003US-00721793.
 PF
 XX 02-DEC-2002; 2002US-0430067P.
 PR
 XX (UYME-) UNIV MEXICO NACIONAL AUTONOMA.
 PA (SILA-) LAB SILANES SA DE CV.
 XX
 XX Corona VM, Garcia RMC, Gurrola BG, Valdez CNA, Becerril LB;
 PI Possani PLD;
 XX WPI; 2005-252753/26.
 DR

XX Novel isolated scorpion toxin polypeptide, useful for preventing
PT envenomation from scorpion stings, and as vaccine to prevent envenomation
PT from venom of scorpions of genus Centruroids.

XX Disclosure; SEQ ID NO 285; 135pp; English.

XX This invention relates to novel scorpion toxin polynucleotides and the
CC encoded proteins thereof having any one of 142 fully defined amino acid
CC sequences given in the specification. Specifically, it refers to long
CC chain toxins that block the sodium channels of excitable cells and also
CC short chain toxins that affect Erg type potassium channels. The present
CC invention describes immunogenic or antigenic compositions comprising a
CC scorpion toxin protein or fragment thereof, which can be used for the
CC generation of antibodies that are able to bind to and neutralize the in
CC vivo effects of scorpion venom. As such, they can be used in compositions
CC or appropriate recombinant fusion proteins in the development of vaccines
CC that can prevent envenomation from stings of scorpions of the genus
CC Centruroids. Furthermore, it provides a diagnostic method that uses an
CC immunogenic matrix for the purification of specific immunoglobulins
CC present in a sample that can determine the species of scorpion that has
CC stung an individual through the detection of identifying antibodies. In
CC addition, it provides methods that are useful for treating envenomation
CC from scorpion stings. This oligonucleotide is an RT-PCR primer used to
CC synthesize cDNA from scorpion toxin total RNA of the invention.

XX Sequence 24 BP; 0 A; 0 C; 0 G; 22 T; 0 U; 2 Other;

Query Match 0.8%; Score 22; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 5.6e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
|||||
DB 22 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 336
ADF12409
ID ADF12409 standard; DNA; 26 BP.
XX ADF12409;
AC ADF12409;
XX 12-FEB-2004 (first entry)
XX L1 retrotransposon endonuclease cleavage site #1.
XX gene therapy; insertional mutation; germ line specific promoter;
XX mutation generation; transgenic animal; poly A element; non-LTR;
XX retrotransposon; long terminal repeats; L1; EN domain; endonuclease;
XX cleavage site; ds.
XX Homo sapiens.
XX US2003121063-A1.
XX 26-JUN-2003.
XX 09-AUG-2002; 2002US-00216122.
XX 16-NOV-1995; 95US-0006831P.
XX 15-NOV-1996; 96US-00749805.
XX 28-APR-1997; 97US-00847844.
XX 01-SEP-2000; 2000US-00653812.
XX (UYPE-) UNIV PENNSYLVANIA.
XX Kazanian HH, Ostertag E, Deberardinis R;
XX WPI; 2003-863454/80.
XX Creating an insertional mutation in the germ line of an animal, useful
PT for generating a mutation in an offspring of an animal, comprises

PT introducing into an animal a nucleic acid molecule comprising a germ line
PT specific promoter.

XX Example 2; Fig 14A; 102pp; English.

XX The invention describes a method of creating an insertional mutation in
CC the germ line of an animal by introducing into an animal a nucleic acid
CC molecule comprising a germ line specific promoter. The method is useful
CC for generating a mutation in an offspring of an animal, or for isolating
CC a nucleic acid from a genome of an offspring of an animal. The method may
CC also be used to correct genetic defects in animals, especially humans.

XX The nucleic acid is useful for generating mutations in a cell for
CC assessing the frequency with which selected cells under go insertional
CC mutagenesis for the generation of transgenic animals. This sequence
CC represents an exemplary cleavage site of the endonuclease encoded by
CC human L1 retrotransposon EN domain.

XX Sequence 26 BP; 22 A; 0 C; 0 G; 0 T; 0 U; 4 Other;

Query Match 0.8%; Score 22; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 5.8e+02;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
|||||
DB 5 AAAAAAAAAAAAAAAAAAAAAA 26

RESULT 337
ABK86170/c
ID ABK86170 standard; DNA; 25 BP.
XX ABK86170;
AC ABK86170;
XX 24-SEP-2002 (first entry)
XX Oligo dT primer #3 used in method to study gene expression.
XX Oligo dT primer; gene expression analysis; primer; ss.
XX Synthetic.
XX WO200236828-A2.
XX 10-MAY-2002.
XX 01-NOV-2001; 2001WO-US045401.
XX 01-NOV-2000; 2000US-0244933P.
XX (GENO-) GENOMIC SOLUTIONS INC.
XX Kane MD, Dombkowski AA, Nagel AC;
XX WPI; 2002-508123/54.
XX Identifying and characterizing gene expression in samples, for
PT identifying mRNAs expressed at different levels, comprises employing an
PT identifier having a oligo-dT primer of a specific sequence and a
PT detectable marker at its 5' end.

XX Example 2; Page 21; 45pp; English.

XX The invention relates to systems for identification and characterisation
CC of gene expression in one or more samples, comprising an identifier having
CC a specific oligo-dT primer sequence, where the identifier comprises a
CC detectable marker at its 5' end. The system is useful for identifying any
CC or all genes expressed in a given in vivo or in vitro RNA sample, as well
CC as the relative differences in mRNA between 2 or more samples, where
CC desired, for supporting discovery of new genes, and for identifying mRNAs
CC that are expressed at different levels between 2 or more samples. The new
CC system or method addresses limitations of prior methods by comprising
CC compositions and systems that incorporate new strategies where molecular

CC sequence represents a primer used to genotype a region of the cow prion
CC protein (PrP) comprising a polymorphic microsatellite locus.

XX
SQ Sequence 25 BP; 0 A; 2 C; 0 G; 23 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.8; DB 1; Length 25;
Best Local Similarity 92.0%; Pred. No. 5.9e+02;
Matches 23; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
|||||
Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 340

AAF16616

ID AAF16616 standard; DNA; 26 BP.

XX

AC AAF16616;

XX 13-MAR-2001 (first entry)

XX Gastric acid production inhibiting oligonucleotide SEQ ID NO: 103.

XX Gastric acid disturbance; gastric reflux; gastritis; dyspepsia;

KW stomach ulcer; duodenal ulcer; Helicobacter pylori; antisense;

KW DNA-RNA hybrid; ss.

XX Homo sapiens.

OS

XX WO200071164-A1.

PN

XX 30-NOV-2000.

XX

PF 24-MAY-2000; 2000WO-AU000498.

XX

PR 24-MAY-1999; 99AU-00000510.

XX

XX (TACH/) TACHAS G.

PA

XX Tachas G;

PI

XX WPI; 2001-025093/03.

DR

XX Treating gastric acid disturbance by administering an oligonucleotide

PT which modulates the activity of a polypeptide involved in gastric acid

PT production or secretion.

XX

XX Example 3; Page 150; 164pp; English.

PS

XX The present invention provides oligonucleotides, and methods for their

CC use, which are useful in modulating the action of proteins involved in

CC gastric acid production. The target protein is preferably the histamine

CC H2 receptor or one of the proteins which form part of the gastric proton

CC pump. The sequences and methods of the invention are useful in the

CC treatment of gastric reflux, gastritis, dyspepsia, stomach ulcers,

CC duodenal ulcers and other gastric acid disturbances, most of which are

CC caused by Helicobacter pylori

XX

SQ Sequence 26 BP; 23 A; 0 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.8; DB 1; Length 26;

Best Local Similarity 92.0%; Pred. No. 6e+02;

Matches 23; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
|||||
Db 1 AAAAAAAAAAGAGAAAAAAAAAGA 25

RESULT 341

AAF16627/C

ID AAF16627 standard; DNA; 23 BP.

XX AAF16627;

XX 13-MAR-2001 (first entry)

XX Gastric acid production inhibiting oligonucleotide SEQ ID NO: 114.

XX Gastric acid disturbance; gastric reflux; gastritis; dyspepsia;

KW stomach ulcer; duodenal ulcer; Helicobacter pylori; antisense;

KW DNA-RNA hybrid; ss.

XX Homo sapiens.

OS

XX WO200071164-A1.

PN

XX 30-NOV-2000.

XX

PF 24-MAY-2000; 2000WO-AU000498.

XX

PR 24-MAY-1999; 99AU-00000510.

XX

XX (TACH/) TACHAS G.

PA

XX Tachas G;

PI

XX WPI; 2001-025093/03.

DR

XX Treating gastric acid disturbance by administering an oligonucleotide

PT which modulates the activity of a polypeptide involved in gastric acid

PT production or secretion.

XX

XX Example 3; Page 152; 164pp; English.

PS

XX The present invention provides oligonucleotides, and methods for their

CC use, which are useful in modulating the action of proteins involved in

CC gastric acid production. The target protein is preferably the histamine

CC H2 receptor or one of the proteins which form part of the gastric proton

CC pump. The sequences and methods of the invention are useful in the

CC treatment of gastric reflux, gastritis, dyspepsia, stomach ulcers,

CC duodenal ulcers and other gastric acid disturbances, most of which are

CC caused by Helicobacter pylori

XX

SQ Sequence 23 BP; 1 A; 0 C; 0 G; 22 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 23;

Best Local Similarity 95.7%; Pred. No. 6e+02; 1; Indels 0; Gaps 0;

Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
|||||

Db 23 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 342

ADT55094

ID ADT55094 standard; DNA; 23 BP.

XX

AC ADT55094;

XX

XX 13-JAN-2005 (first entry)

XX

XX Electrophoresis apparatus-related DNA sequence #2.

XX electrophoresis apparatus; variant gene isolation;

KW gene mutation detection; variant gene detection;

KW single nucleotide polymorphism analysis; SNP detection; ds.

XX Unidentified.

OS

XX JF2004298001-A.

PN

XX 28-OCT-2004.

XX

PF 28-MAR-2003; 2003JP-00091194.
 PR 28-MAR-2003; 2003JP-00091194.
 XX
 PA (MATU) MATSUSHITA DENKI SANGYO KK.
 XX
 DR WPI; 2004-760825/75.
 XX
 XX Electrophoresis apparatus useful for isolating variant gene, comprises
 PT heating apparatus, and sealed flow path comprising linear polymer and DNA
 PT joint controlling agent, with DNA conjugates for separation, purification
 PT and assay.
 XX
 PS Disclosure; Fig 2; 2lpp; Japanese.
 XX
 CC The invention comprises an electrophoresis apparatus for isolating
 CC variant genes. The apparatus consists of: a sealed flow path filled with
 CC buffer containing linear polymer and DNA joint controlling agent, and
 CC containing DNA conjugate for separation, DNA conjugate for purification,
 CC and DNA conjugate for assay; and a heating apparatus for heating the
 CC portion of sealed flow path in which the DNA conjugate for heating is
 CC fixed. The electrophoresis apparatus is useful for isolating a variant
 CC gene. The electrophoresis apparatus is also useful in gene diagnosis for
 CC detecting the presence or absence of a gene mutation, or variant gene,
 CC and for single nucleotide polymorphism analysis. The present DNA sequence
 CC was shown in a figure exemplifying the method of the invention.
 XX
 SQ Sequence 23 BP; 22 A; 0 C; 1 G; 0 T; 0 U; 0 Other;
 XX
 Query Match 0.8%; Score 21.4; DB 1; Length 23;
 Best Local Similarity 95.7%; Pred. No. 6e+02; Mismatches 1; Indels 0; Gaps 0;
 Matches 22; Conservative 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
 Db 1 AAAAAAAAAAGAAAAAAAAA 23
 XX
 RESULT 343
 ADT55095/C
 ID ADT55095 standard; DNA; 23 BP.
 XX
 AC ADT55095;
 XX
 DT 13-JAN-2005 (first entry)
 XX
 DE Electrophoresis apparatus-related DNA sequence #3.
 XX
 KW electrophoresis apparatus; variant gene isolation;
 KW gene mutation detection; variant gene detection;
 KW single nucleotide polymorphism analysis; SNP detection; ss.
 XX
 OS Unidentified.
 XX
 PN JP2004298001-A.
 XX
 PD 28-OCT-2004.
 XX
 XX 28-MAR-2003; 2003JP-00091194.
 PF
 XX 28-MAR-2003; 2003JP-00091194.
 PR
 XX (MATU) MATSUSHITA DENKI SANGYO KK.
 PA
 XX WPI; 2004-760825/75.
 DR
 XX Electrophoresis apparatus useful for isolating variant gene, comprises
 PT heating apparatus, and sealed flow path comprising linear polymer and DNA
 PT joint controlling agent, with DNA conjugates for separation, purification
 PT and assay.
 XX
 PS Disclosure; Fig 4; 2lpp; Japanese.
 XX

CC The invention comprises an electrophoresis apparatus for isolating
 CC variant genes. The apparatus consists of: a sealed flow path filled with
 CC buffer containing linear polymer and DNA joint controlling agent, and
 CC containing DNA conjugate for separation, DNA conjugate for purification,
 CC and DNA conjugate for assay; and a heating apparatus for heating the
 CC portion of sealed flow path in which the DNA conjugate for heating is
 CC fixed. The electrophoresis apparatus is useful for isolating a variant
 CC gene. The electrophoresis apparatus is also useful in gene diagnosis for
 CC detecting the presence or absence of a gene mutation, or variant gene,
 CC and for single nucleotide polymorphism analysis. The present DNA sequence
 CC was shown in a figure exemplifying the method of the invention.
 XX
 SQ Sequence 23 BP; 0 A; 1 C; 0 G; 22 T; 0 U; 0 Other;
 XX
 Query Match 0.8%; Score 21.4; DB 1; Length 23;
 Best Local Similarity 95.7%; Pred. No. 6e+02; Mismatches 1; Indels 0; Gaps 0;
 Matches 22; Conservative 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
 Db 23 AAAAAAAAAAGAAAAAAAAA 1
 XX
 RESULT 344
 AAI66361/C
 ID AAI66361 standard; DNA; 24 BP.
 XX
 AC AAI66361;
 XX
 DT 23-JAN-2002 (first entry)
 XX
 DE Human phosphatidylinositol-3 kinase 35 cDNA PCR primer #2.
 XX
 KW Human; phosphatidylinositol-3 kinase 35; PTDINS-3 kinase 35; cancer;
 KW haemopathy; development disorder; HIV infection; immunological disease;
 KW inflammation; gene therapy; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200175014-A2.
 XX
 PD 11-OCT-2001.
 XX
 PF 16-MAR-2001; 2001WO-CN000328.
 XX
 PR 17-MAR-2000; 2000CN-00114973.
 XX
 PA (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.
 XX
 PI Mao Y, Xie Y;
 XX
 DR WPI; 2002-025836/03.
 XX
 XX New human phosphatidylinositol-3 (PTDINS3) kinase 35 for diagnosing and
 PT treating malignant tumor, hemopathy, human immunodeficiency virus
 PT infection, immunological diseases and various inflammations.
 XX
 PS Example 2; Page 12; 34pp; Chinese.
 XX
 CC The present invention provides the protein and coding sequences of human
 CC phosphatidylinositol-3 (PTDINS-3) kinase 35. The sequences can be used in
 CC the treatment of cancer, haemopathy, HIV infection, development
 CC disorders, immunological diseases and inflammation. The present sequence
 CC is a PCR primer for the coding sequence of the invention
 XX
 SQ Sequence 24 BP; 3 A; 0 C; 1 G; 20 T; 0 U; 0 Other;
 XX
 Query Match 0.8%; Score 21.4; DB 1; Length 24;
 Best Local Similarity 95.7%; Pred. No. 6.1e+02; Mismatches 1; Indels 0; Gaps 0;
 Matches 22; Conservative 0;
 QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2729
 || |||||

PT Characterizing cellular activity of compound, by receiving images of
 PT cells with known activity and images of cells treated with compound,
 PT characterizing phenotypic attributes of images and comparing the
 XX phenotypes.

XX Disclosure; Fig 18; 139pp; English.

CC This invention relates to a novel method for the characterisation of the
 CC activity of a compound on cell. The method involves receiving images of
 CC cells with a cellular activity and images of other cells treated with the
 CC compound, quantitatively characterising phenotypic attributes of the
 CC image of cells with a cellular activity to produce a target phenotype for
 CC the cellular activity and that of the image of other cells to produce a
 CC second phenotype for the compound, and comparing the two phenotypes to
 CC determine whether the compound possesses cellular activity. The invention
 CC may be useful for characterising cellular activity of a compound, for
 CC determining information about properties of substances based upon the
 CC information about structure of living or non-living cells exposed to
 CC substances. The invention is also useful for identifying promising
 CC candidates in a search for new and better medicines and treatments using
 CC multiple biological descriptors from a single cell markers or components.

XX Sequence 24 BP; 2 A; 0 C; 0 G; 22 T; 0 U; 0 Other;

Query Match 0.8%; Score 21.4; DB 1; Length 24;
 Best Local Similarity 95.7%; Pred. No. 6.1e+02;
 Matches 22; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731

DB 24 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 348

AAQ75712/c

ID AAQ75712 standard; DNA; 21 BP.

XX AAQ75712;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

XX aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX Disclosure; Page 7; 11pp; Japanese.

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
 SQ Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2705 TACTAAAAAAAAAAAAAAAAA 2725

DB 21 TACTAAAAAAAAAAAAAAAAA 1

RESULT 349

AAAX26973/c

ID AAAX26973 standard; cDNA; 21 BP.

XX AAAX26973;

XX 25-JUN-1999 (first entry)

XX Primer used to reverse transcribe mamaglobin RNA.

XX Human; mammary-specific protein; mamaglobin; antigen; vaccine;

XX mamaglobin-expressing cancer; breast cancer;

XX autologous tumor lymphocyte; diagnosis; marker; primer; ss.

XX Synthetic.

XX WO9914230-A1.

XX 25-MAR-1999.

XX 18-SEP-1998; 98WO-US017991.

XX 18-SEP-1997; 97US-00933149.

XX (UNIW) UNIV WASHINGTON.

XX Watson MA, Fleming TP;

XX WPI; 1999-244021/20.

XX Mamaglobin, secreted protein overexpressed in breast cancer.

XX Example 2; Page 55; 60pp; English.

CC The present primer was used to reverse transcribe RNA encoding a human
 CC mammary-specific protein, designated mamaglobin. The specification
 CC describes a protein comprising a mamaglobin antigen that is recognized
 CC by B and/or Tc cells specific for the natural, secreted and glycosylated
 CC form of mamaglobin polypeptide. This protein, or recombinant vectors
 CC that express it, are used in vaccines for treating mamaglobin-
 CC expressing cancers, specifically of the breast. Such cancers can also be
 CC treated using autologous tumor lymphocytes activated ex vivo with an
 CC mamaglobin antigen, then returned to the patient. Expression of
 CC mamaglobin is elevated in 27% of stage I primary breast cancers, so it
 CC represents a marker useful for diagnosis of this disease

XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 6.1e+02;

Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729

DB 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 350

AAZ44350/c

ID AAZ44350 standard; DNA; 21 BP.

XX

```
AC AAZ44350;
XX
XX
DT 04-APR-2000 (first entry)
XX
DE Protein kinase inhibiting primer #12.
XX
XX Antimicrobial; cytostatic; immunosuppressive; protein kinase;
KW prophylactic; therapy; treatment; cancer; autoimmune disease;
KW pathogenic microorganism; primer; ss.
XX
XX Unidentified.
OS
XX
XX US5998596-A.
PN
XX
XX 07-DEC-1999.
PD
XX
XX 04-APR-1995; 95US-00416214.
PF
XX
XX 04-APR-1995; 95US-00416214.
PR
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA
XX
XX Bergan R, Neckers L;
PI
XX
XX WPI; 2000-104623/09.
DR
XX
XX Oligonucleotides inhibiting protein kinase, useful for treating diseases
PT such as cancer and autoimmune disease.
PT
XX
XX Example 8; Col 27-28; 26pp; English.
PS
XX
XX This invention describes novel purified aptameric oligonucleotides which
CC have antimicrobial, cytostatic and immunosuppressive activity. The
CC oligonucleotides are useful for binding to and preventing or inhibiting
CC the biological function of a protein kinase or a target molecule and for
CC detecting the presence or absence of a target molecule in biological
CC samples. The oligonucleotides are also useful for prophylactic and
CC therapeutic treatment of diseases also as cancer, autoimmune diseases and
CC diseases caused by pathogenic microorganisms. This sequence represents a
CC primer used in the method of the invention
XX
XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 351
AAD03631/c
ID AAD03631 standard; DNA; 21 BP.
XX
XX
AC AAD03631;
XX
XX 19-JUN-2001 (first entry)
DT
XX
XX Human ku autoantigen amplifying KU_FOR primer.
DE
XX
XX Human; natural antisense mRNA enrichment; antisense-based therapy;
KW RT-PCR primer; ku autoantigen; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200125488-A2.
PN
XX
XX 12-APR-2001.
PD
XX
XX 06-OCT-2000; 2000WO-US027557.
PF
XX
XX
```

```
PR 06-OCT-1999; 99US-0157843P.
XX
XX (QUAR-) QUARK BIOTECH INC.
PA
XX
XX Gilad S, Einat P, Grossman A;
PI
XX
XX WPI; 2001-266326/27.
DR
XX
XX Enrichment and detection of natural antisense mRNA comprises generating
XX double stranded hybrid cDNA using a polymerase with an exonuclease
PT activity, amplifying using a DT primer and cloning.
PT
XX
XX Example; Page 12; 37pp; English.
PS
XX
XX The invention relates to a method for enrichment of natural antisense
XX messenger RNA. This method involves generating a population of cDNA from
CC mRNA, incubating the generated cDNA to produce double stranded hybrid DNA
CC molecules consisting of sense and antisense cDNA, treating the hybrid
CC molecules using DNA polymerase with an exonuclease activity, amplifying
CC the double stranded molecule using a deoxythymidine (dT) primer and
CC cloning the amplified double stranded molecule. This method is useful for
CC enrichment of natural antisense mRNA from any natural source of RNA. It
CC is used to detect whether mRNAs have a natural anti-sense counterpart.
CC The method provides a basis for finding new genes with important cellular
CC regulatory roles or new regulatory information for known genes and
CC provides a starting material for development of an antisense-based
CC therapeutic to treat a disease in which down regulation or inhibition of
CC the sense gene or transcript is involved. The present sequence is KU FOR
CC reverse transcription PCR (RT-PCR) primer used for amplifying human ku
CC autoantigen sequence. This primer is used in endogenous antisense
CC identification (EASI) procedure for enrichment of natural antisense mRNA
CC
XX
XX Sequence 21 BP; 6 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2690 AGAGCCCTAAGTTTGTACTAA 2710
Db 21 AGAGCCCTAAGTTTGTACTAA 1

RESULT 352
AAF99707/c
ID AAF99707 standard; DNA; 21 BP.
XX
XX
AC AAF99707;
XX
XX 12-JUN-2001 (first entry)
DT
XX
XX Immunostimulatory nucleic acid #823.
DE
XX
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
XX Synthetic.
OS
XX
XX WO200122972-A2.
PN
XX
XX 05-APR-2001.
PD
XX
XX 25-SEP-2000; 2000WO-US026383.
PF
XX
XX 25-SEP-1999; 99US-0156113P.
PR
XX
XX 27-SEP-1999; 99US-0156135P.
PR
XX
XX 23-AUG-2000; 2000US-0227436P.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
PA
XX
XX (COLE-) COLEY PHARM GMBH.
PA
XX
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PI Krieg AM, Schetter C, Vollmer J;
XX WPI; 2001-273485/28.
XX
XX Vaccinating against tumors, infectious diseases, allergies and asthma
XX using immunostimulatory Py-rich and TG nucleic acids.
XX
XX Claim 101; Page 56; 339pp; English.
XX
XX The present invention relates to a method for stimulating an immune
XX response. The method comprises administering an immunostimulatory nucleic
XX acid to a non-rodent subject in sufficient quantity to stimulate an
XX immune response. The present sequence is one such immunostimulatory
XX nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX also useful for preventing cancer, asthma, infectious disease, allergy or
XX immune deficiency. The present sequence can also be used to redirect a
XX Th2 to a Th1 immune response and to activate immune cells. Note: the
XX present sequence may have a phosphorothioate backbone
XX
XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 353
AAH42480/C
ID AAH42480 standard; DNA; 21 BP.
XX
XX AC AAH42480;
XX
XX 01-OCT-2001 (first entry)
XX
XX Oligonucleotide used to produce branched chain compounds.
XX
XX Branched chain compound; nucleic acid synthesis; primer extension;
XX reverse transcription; nucleic acid hybridization;
XX nucleic acid amplification; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX /note= "NH2-C6 attached"
XX
XX modified_base 4 /*tag= b
XX /note= "NH2-C6 attached"
XX
XX misc_feature 6..7 /*tag= c
XX /note= "branch present"
XX
XX EPI111068-A1.
XX
XX 27-JUN-2001.
XX
XX 21-DEC-1999; 99EP-00125484.
XX
XX 21-DEC-1999; 99EP-00125484.
XX
XX (LION-) LION BIOSCIENCE AG.
XX (VECG-) VEC GENOMICS GMBH.
XX

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PI Schmidt W, Hiller R, Huber M, Mueller M;
XX WPI; 2001-466959/51.
XX
XX Branched compounds useful in e.g. nucleic acid synthesis reaction
XX comprises nucleic acid moieties optionally extended by a polymerase.
XX
XX Example 1; Page 10; 31pp; English.
XX
XX The specification describes branched compounds containing nucleic acid
XX moieties optionally extended by a polymerase. The branched chain
XX compounds of the invention are used in nucleic acid synthesis reaction,
XX primer extension reaction, reverse transcription reaction of RNA into
XX DNA, nucleic acid hybridization experiment (for identifying sequence of a
XX nucleic acid), and nucleic acid amplification experiment (for analysing
XX the expression pattern of genes). The compounds are also used in solid-
XX phase enzymatic reactions. The present sequence was used in the course of
XX the invention to produce branched chain compounds
XX
XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 354
AAH45788/C
ID AAH45788 standard; DNA; 21 BP.
XX
XX AC AAH45788;
XX
XX 07-SEP-2001 (first entry)
XX
XX Human KUAPP70 gene PCR primer SEQ ID NO: 40.
XX
XX Nucleic acid amplification; adapter DNA; human; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX WO200138572-A1.
XX
XX 31-MAY-2001.
XX
XX 16-NOV-2000; 2000WO-JP008073.
XX
XX 19-NOV-1999; 99JP-00330726.
XX
XX 25-JUL-2000; 2000JP-00224663.
XX
XX (TAKI ) TAKARA SHUZO CO LTD.
XX
XX Aoyagi K, Sasaki H, Terada M, Mineno J, Asada K, Kato I;
XX WPI; 2001-355947/37.
XX
XX Amplifying nucleic acids with base sequences of mRNAs in sample while
XX sustaining the ratio among them used to monitor mRNA expression,
XX applicable in producing e.g. cRNA library and DNA microarrays.
XX
XX Example 1; Page 64; 67pp; Japanese.
XX
XX The present invention describes a method of amplifying nucleic acids,
XX involving forming a single-stranded DNA to an mRNA in a sample with a
XX primer, synthesising a DNA strand complementary to the single-stranded
XX DNA to form a double-stranded DNA, adding a single or double-stranded
XX adapter DNA to the double-stranded DNA, and amplifying the DNA strand
XX using a second primer with a nucleic acid sequence in the adapter DNA.
XX This can be used to amplify nucleic acids to monitor mRNA expression,
XX which is applicable in producing e.g. cRNA libraries, cDNA libraries, DNA

```

CC microarrays or membrane arrays in gene engineering and gene expression
 CC analysis, and in drug development and health maintenance and management.
 CC The present sequence is a PCR primer described in the exemplification of
 CC the invention
 XX
 SQ Sequence 21 BP; 6 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2416 TTACGGGCTGAACAGTGGTCT 2436
 DB 21 TTACGGGCTGAACAGTGGTCT 1

RESULT 355
 ABS78428/c
 ID ABS78428 standard; DNA; 21 BP.
 XX
 AC ABS78428;
 XX
 DT 13-DEC-2002 (first entry)
 XX
 DE Angiogenesis inhibitory oligonucleotide #912.
 XX
 KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
 KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
 KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
 KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
 KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
 KW plaque neovascularisation; telangiectasia; haemophiliac joint;
 KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
 KW scleroderma; hypertrophic scar.
 XX
 OS Synthetic.
 XX
 FN WO200253141-A2.
 XX
 PD 11-JUL-2002.
 XX
 XX 14-DEC-2001; 2001WO-US048458.
 XX
 XX 14-DEC-2000; 2000US-0255534P.
 XX
 PA (COLE-) COLEY PHARM GROUP INC.
 XX
 PI Bratzler RL;
 XX
 DR WPI; 2002-566690/60.
 XX
 XX Inhibiting angiogenesis in a subject, involves administering at least one
 PT antiangiogenic nucleic acid molecule to the subject.
 PT
 XX
 XX Claim 2; Page 35; 276pp; English.
 PS
 XX The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophiliac joints, angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
 DB 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 356
 ABL39404/c
 ID ABL39404 standard; DNA; 21 BP.
 XX
 AC ABL39404;
 XX
 DT 16-APR-2002 (first entry)
 XX
 DE Immunostimulatory nucleic acid SEQ ID NO: 840.
 XX
 KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
 KW angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..21
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone"
 XX
 PN WO200197843-A2.
 XX
 PD 27-DEC-2001.
 XX
 XX 22-JUN-2001; 2001WO-US020154.
 XX
 XX 22-JUN-2000; 2000US-0213346P.
 XX
 PA (IOWA) UNIV IOWA RES FOUND.
 XX
 PI Weiner G, Hartmann G;
 XX
 DR WPI; 2002-154611/20.
 XX
 XX Treating or preventing cancer, such as basal cell carcinoma, comprises
 PT administering immunostimulatory nucleic acids that induce expression of
 PT cell surface antigens and antibodies to a subject having or at risk of
 PT developing cancer.
 XX
 PS Disclosure; Page 309; 312pp; English.
 XX
 XX The present invention relates to methods for treating or preventing
 CC cancer, involving administering to a subject having or at risk of
 CC developing cancer immunostimulatory nucleic acids that induce expression
 CC of cell surface antigens and antibodies. The methods are useful for
 CC treating or preventing cancer such as basal cell carcinoma, bladder
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 CC breast cancer, cervical cancer, colon and rectum cancer, connective
 CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
 CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 CC present sequence is an immunostimulatory oligonucleotide described in the
 CC exemplification of the invention
 XX
 SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729

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Db      21 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 357
AAD51323/c
ID AAD51323 standard; DNA; 21 BP.
XX
AC AAD51323;
XX
DT 16-APR-2003 (first entry)
XX
DE Regular oligo dT primer used to illustrate the method of the invention.
XX
KW Laminitis; viral disease; vaccine; bacterial disease; primer; epistaxis;
KW gastritis; gastric ulcer; respiratory ailment; fracture; joint disease;
KW musculoskeletal damage; ss.
XX
OS Unidentified.
XX
PN WO200290579-A1.
XX
PD 14-NOV-2002.
XX
PF 03-MAY-2002; 2002WO-AU0000553.
XX
PR 04-MAY-2001; 2001AU-00004809.
PR 29-JUN-2001; 2001US-00896941.
XX
(PATENT) GENOMICS RES PARTNERS PTY LTD.
PA Brandon RB;
XX
PI WPI; 2003-120558/11.
XX
DR Assessing condition e.g. athletic ability, stage of disease, presence of
PT drugs, response to exercise, response to vaccines, therapies, nutritional
PT states, of performance animal involves analyzing nucleic acid expression.
XX
PS Disclosure; Page 46; 87pp; English.
XX
CC The invention relates to a method for assessing a condition of a
CC performance animal. The method involves determining in sample abundance
CC of expressed target nucleic acid; transmitting digital sample signal to
CC remote diagnostic server; processing digital sample signal at remotely
CC located database to correlate digital signal with digital information and
CC returning report of particular condition of animal. The method is useful
CC for assessing a condition of a performance animal preferably human, dog
CC or camel. The condition can be an athletic ability and a condition that
CC enhances, hinders, impedes or does not change an expected ability of the
CC performance animal; and also normal, pre-clinical, overt progress and/or
CC stage of disease, undiagnosed or unclassified conditions, presence of
CC drugs, response to exercise, response to vaccines, therapies, nutritional
CC states and response to environmental conditions. Diseases assessed by the
CC invention include laminitis, lameness, viral or bacterial disease,
CC gastritis, gastric ulcers, respiratory ailments, fractures, epistaxis,
CC musculoskeletal damage or disorders and joint diseases. The present
CC sequence is a primer used to illustrate the method of the invention
XX
SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 358
ACH03246/c
ID ACH03246 standard; DNA; 21 BP.
XX
ACH03246;
XX
DT 25-SEP-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #881.
XX
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
OS Synthetic.
XX
PN US2003050268-A1.
XX
PD 13-MAR-2003.
XX
PF 29-MAR-2002; 2002US-00112653.
XX
PR 29-MAR-2001; 2001US-0279642P.
XX
(KRIE/) KRIEG A M.
(PATENT) (BERG/) BERG D J.
PA Krieg AM, Berg DJ;
XX
PI WPI; 2003-521815/49.
XX
DR Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
PT disease by administering an immunostimulatory nucleic acid.
XX
PS Disclosure; Page 33; 229pp; English.
XX
CC The invention describes a method of treating non-allergic inflammatory
CC disease comprising administering to a subject having or at risk of
CC developing a non-allergic inflammatory disease an immunostimulatory
CC nucleic acid for prevention or treatment of the disease. The method is
CC useful for treating non-allergic inflammatory diseases, such as
CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC This sequence represents an immunostimulatory nucleic acid
XX
SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 359
ADB37209/c
ID ADB37209 standard; DNA; 21 BP.
XX
AC ADB37209;
XX
DT 04-DEC-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #823.
XX
KW ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
KW hypo-responsive subject; immunostimulatory.
XX
OS Synthetic.
XX
PN US2003087848-A1.
XX
PD 08-MAY-2003.

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```
XX 02-FEB-2001; 2001US-00776479.
PF
XX
PR 03-FEB-2000; 2000US-0179991P.
XX
XX (BRAT/) BRATZLER R L.
PA (PETE/) PETERSEN D M.
PA (FOUR/) FOURON Y.
XX
XX Bratzler RL, Petersen DM, Fouron Y;
PI WPI; 2003-657977/62.
XX
XX Treating and/or preventing allergy or asthma using an immunostimulatory
PT nucleic acid alone or in combination with an asthma/allergy medicament.
XX
XX Disclosure; Page 17; 221pp; English.
XX
XX The invention relates to a method of treating or preventing allergy or
CC asthma which comprises administering to a subject a poly-G nucleic acid
CC in an aerosol formulation. The methods and compositions of the present
CC invention are useful for diagnosing and/or treating asthma and allergy
CC especially in a hypo-responsive subject. The present sequence represents
CC an immunostimulatory nucleic acid of the invention.
XX
XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 360
ADC24379/c
ID ADC24379 standard; DNA; 21 BP.
AC
AC ADC24379;
XX
DT 18-DEC-2003 (first entry)
XX
XX PCR primer for amplifying the ATP dependant DNA helicase gene #SEQ ID 69.
DE
XX DNA amplification; copy number; polymerase chain reaction; PCR; primer;
KW 55.
XX
XX Synthetic.
OS
XX
XX JP2002345466-A.
PN
XX
XX 03-DEC-2002.
PD
XX
XX 08-MAY-2001; 2001JP-00137858.
PF
XX
XX 08-MAY-2001; 2001JP-00137858.
PR
XX
XX (TAKA-) TAKARA BIO KK.
PA
XX (KOKU-) KOKURITSU GAN CENT SOCHO.
PA
XX (IYAK-) IYAKUJIN FUKUSAYO HIGAI KYUSAI KENKYU SH.
XX
XX WPI; 2003-460878/44.
XX
XX Amplification of DNA maintaining genes and copy number of the sequence on
PT a genome, and their ratios in the resultant DNA fragment.
XX
XX Example 5; SEQ ID NO 69; 33pp; Japanese.
XX
XX The invention relates to a method for the amplification of DNA that
CC maintains genes and copy number of the sequence. This method is useful
CC for easy and operable amplification of DNA. The method was carried out by
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CC fragmentation genomic DNA, preparation of blunt end of the fragmented
CC DNA, ligation of an adapter to the blunted DNA, PCR of the ligated DNA in
CC 2 steps, and confirmation of the amplified APC gene. The current sequence
CC represents a PCR primer used in an example from the invention.
XX
XX Sequence 21 BP; 6 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2416 TTACGGGCTGAAGAGTGGTCT 2436
Db 21 TTACGGGCTGAAGAGTGGTCT 1
RESULT 361
ADK01344/c
ID ADK01344 standard; DNA; 21 BP.
XX
XX AC ADK01344;
XX
XX 06-MAY-2004 (first entry)
DT
XX
XX Rat DNA microarray capture oligonucleotide #64.
DE
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
OS
XX
XX DE10208794-A1.
PN
XX
XX 04-SEP-2003.
PD
XX
XX 28-FEB-2002; 2002DE-01008794.
PF
XX
XX 28-FEB-2002; 2002DE-01008794.
PR
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
PA
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
PI WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 6; 8pp; German.
PS
XX
XX This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular.
CC Physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
```

CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729

Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 362

ADK01341/c
 ID ADK01341 standard; DNA; 21 BP.

AC ADK01341;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #61.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 XX blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 6; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.

CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX SQ Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 6.1e+02;

Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728

Db 21 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 363

ADK01330/c
 ID ADK01330 standard; DNA; 21 BP.

AC ADK01330;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #50.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 XX blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-

conducting properties and especially in the form of a chip. Its surface is particularly a layer of (bio)molecular filaments and binding of single stranded nucleic acids to the surface is (quasi)covalent, supramolecular, physical, stimulated by an electrical field or through a molecular sieve. The method is used (i) for analysis of patterns, especially in mucosal, hair root, blood, nerve or germ cells and (ii) for determining the activity of pharmaceuticals and/or nutritional compounds, e.g. food additives or supplements, especially minerals, trace elements, organic acids (amino, carboxylic or fatty acid) or their derivatives, salts and mixtures. The method provides rapid, inexpensive and reproducible representation of differences in pools of nucleic acids from cells. It allows imaging of the complete pattern of all nucleic acid in a cell, and can detect very small differences in the nucleic acid pool. Since the method is based on comparison of nucleic acid pools, not individual genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent capture probes used in the method of the invention.

Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
 Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2727
 Db 21 CTAATAAAAAAAAAAAAAA 1

RESULT 364

ADK01288/c

ID ADK01288 standard; DNA; 21 BP.

AC ADK01288;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #8.

ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root; blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

PN DE10208794-A1.

PD 04-SEP-2003.

PF 28-FEB-2002; 2002DE-01008794.

PR 28-FEB-2002; 2002DE-01008794.

PA (DEGS) DEGUSSA BIOACTIVES GMBH.

PI Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

Sorting single-stranded nucleic acid, useful for analyzing expression patterns and screening active agents, uses capture agent with variable and constant regions.

PS Example; Page 5; 8pp; German.

This invention describes a novel method for sorting single-stranded nucleic acids by isolation and hybridisation of nucleic acid pools, then reading out, where the nucleic acids are selectively bound using capture agents that are (a) immobilised on the surface of a solid matrix and (b) comprise variable and non-variable regions. The capture oligonucleotides have a 5'-invariable anchor region, the complement of which is present at least once in each nucleic acid and a 3'-variable, discriminatory region that comprises all possible combinations of up to 10 nucleotides to allow binding of particular sorts of single stranded nucleic acids. The capture agents are particularly locked nucleic acids (LNA) and the anchor region

comprises a sequence of 10-50, particularly 15-25, T residues. The capture oligonucleotides are biotinylated and immobilised on a surface by interaction with streptavidin. The matrix is of plastic, ceramic, glass, metal, resin, gel, crystalline material and/or membrane, having semi-conducting properties and especially in the form of a chip. Its surface is particularly a layer of (bio)molecular filaments and binding of single stranded nucleic acids to the surface is (quasi)covalent, supramolecular, physical, stimulated by an electrical field or through a molecular sieve. The method is used (i) for analysis of patterns, especially in mucosal, hair root, blood, nerve or germ cells and (ii) for determining the activity of pharmaceuticals and/or nutritional compounds, e.g. food additives or supplements, especially minerals, trace elements, organic acids (amino, carboxylic or fatty acid) or their derivatives, salts and mixtures. The method provides rapid, inexpensive and reproducible representation of differences in pools of nucleic acids from cells. It allows imaging of the complete pattern of all nucleic acid in a cell, and can detect very small differences in the nucleic acid pool. Since the method is based on comparison of nucleic acid pools, not individual genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent capture probes used in the method of the invention.

Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 6.1e+02;

Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAA 2726

Db 21 ACTAAAAAAAAAAAAAAAAA 1

RESULT 365

ADM96310/c

ID ADM96310 standard; DNA; 21 BP.

AC ADM96310;

DT 17-JUN-2004 (first entry)

DE Human ATP5F1 gene, RT-PCR primer #1.

ss; human; H+ transporting; mitochondrial ATP synthase; subunit B;

isoform 1; ATP5F1; reverse transcriptase; RT-PCR; primer.

OS Synthetic.

PN US2003211483-A1.

PD 13-NOV-2003.

PF 09-MAY-2002; 2002US-00144179.

PR 09-MAY-2002; 2002US-00144179.

PA (SCHR/) SCHROEDER B G.

PA (CHEN/) CHEN C.

PA (SCHR/) SCHROTH G P.

XX Schroeder BG, Chen C, Schroth GP;

XX WPI; 2003-901581/82.

Enriching low abundance polynucleotides in a sample, useful for gene expression analysis, comprises exposing the sample to an enzymatically non-extendable nucleobase oligomer to block polymerase activity on high abundance species.

Example 1; Page 20; 43pp; English.

The invention relates to a method of enriching a low abundance polynucleotide in a sample of polynucleotides comprising a low abundance and a high abundance polynucleotide. The method comprises exposing the

CC sample to an enzymatically non-extendable nucleobase oligomer having a
 CC nucleobase sequence complementary to a sequence within the high abundance
 CC polynucleotide under conditions so that base pairing occurs, and
 CC subjecting the sample to conditions for polymerase extension. Preferably,
 CC the enzymatically non-extendable nucleobase oligomer does not have a
 CC ribose-containing oligomeric structure. It is a peptide nucleic acid
 CC (PNA) oligomer or is a modified nucleotide oligomer or internucleotide
 CC analogue oligomer. The modified nucleotide oligomer is selected from 2'-
 CC modified and 3'-modified nucleotide oligomers. The 2'-modified and 3'-
 CC modified nucleotide oligomers are selected from 2'-O-alkyl modified
 CC nucleotide oligomers and 3'-alkyl modified nucleotide oligomers. The 2'-O
 CC -alkyl modified nucleotide oligomers are 2'-O-methyl nucleotide
 CC oligomers. The modified nucleotide oligomer or internucleotide analogue
 CC oligomer is selected from locked nucleic acids (LNA), N³-PS',
 CC phosphoramidate (NP) oligomers, minor groove binder-linked-
 CC oligonucleotides (MGB-linked oligonucleotides), phosphorothioate (PS)
 CC oligomers, C1-C4 alkylphosphonate oligomers, phosphoramidates, beta-
 CC phosphodiester oligonucleotides, and alpha-phosphodiester
 CC oligonucleotides. The C1-C4 alkylphosphonate oligomers are methyl
 CC phosphonate (MP) oligomers. The enzymatically non-extendable nucleobase
 CC oligomer is chimeric. The sample comprises more than one high abundance
 CC polynucleotide. The sample comprises RNA, and polymerase extension is by
 CC reverse transcription to yield a first strand cDNA. The method further
 CC comprises second strand cDNA synthesis. The sample is exposed to the
 CC nucleobase oligomer during the first and/or second strand cDNA synthesis.
 CC The method further comprises an amplification step, which is by
 CC polymerase chain reaction (PCR) or by in vitro transcription. The RNA is
 CC mRNA or cRNA or total cellular RNA. Alternatively, the sample comprises
 CC DNA, and polymerase extension is by DNA-dependent DNA polymerase in a
 CC PCR. The method also comprises labelling the amplified polynucleotides.
 CC The labelling is concomitant with or subsequent to amplification. The
 CC methods are useful in selective enrichment of low abundance
 CC polynucleotides in a sample. The pool of enriched polynucleotides may be
 CC used in analysing gene expression and in creating cDNA libraries. The
 CC present sequence represents a reverse transcriptase (RT)-PCR primer which
 CC was used to amplify the human import precursor of subunit B of the H+
 CC transporting, mitochondrial ATP synthase, subunit B, isoform 1 (ATP5F1)
 CC gene.

XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
 |||||
 Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 366
 ADJ88057/c
 ID ADJ88057 standard; DNA; 21 BP.
 XX
 AC ADJ88057;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE RT primer used in the synthesis of an artificial gene transcript.
 XX
 KW Selective enrichment; gene expression; RT; reverse transcriptase; primer;
 KW ss.
 XX
 OS Unidentified.
 XX
 PN US2004014105-A1.
 XX
 PD 22-JAN-2004.
 XX
 PF 09-MAY-2003; 2003US-00435489.
 XX
 PR 09-MAY-2002; 2002US-00144179.
 XX

PA (SCHR/) SCHROEDER B G.
 PA (CHEN/) CHEN C.
 PA (SCHR/) SCHROTH G P.
 XX
 PI Schroeder BG, Chen C, Schroth GP;
 XX
 DR WPI; 2004-121562/12.
 XX
 PT Enriching low abundance polynucleotide relative to a high abundance
 PT polynucleotide in a sample, for analyzing gene expression and creating
 PT cDNA libraries, comprises blocking polymerase activity on high abundance
 PT polynucleotides.
 XX
 PS Example 1; SEQ ID NO 41; 62pp; English.
 XX
 CC The present invention relates to methods for the selective enrichment of
 CC low abundance polynucleotides. The invention is useful for analysing gene
 CC expression in a sample and creating cDNA libraries. The present sequence
 CC is reverse transcriptase (RT) primer used in the synthesis of an
 CC artificial gene transcript.
 XX
 SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
 Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
 |||||
 Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 367
 ADM07216/c
 ID ADM07216 standard; DNA; 21 BP.
 XX
 AC ADM07216;
 XX
 DT 15-JUL-2004 (first entry)
 XX
 DE Control primer used in cDNA first strand synthesis.
 XX
 KW Double-stranded cDNA synthesis; cDNA first strand synthesis;
 KW cDNA second strand synthesis; RNA template; RNA amplification;
 KW differential gene expression; primer; ss.
 XX
 OS Synthetic.
 XX
 PN US2004081962-A1.
 XX
 PD 29-APR-2004.
 XX
 PF 23-OCT-2002; 2002US-00278760.
 XX
 PR 23-OCT-2002; 2002US-00278760.
 XX
 PI (CHEN/) CHEN C.
 PA (SCHR/) SCHROEDER B.
 PA (BRAN/) BRANDIS J.
 PA (SCHR/) SCHROTH G.
 XX
 PI Chen C, Schroeder B, Brandis J, Schroth G;
 XX
 DR WPI; 2004-340131/31.
 XX
 PT Synthesizing double-stranded cDNA, by synthesizing a cDNA strand from RNA
 PT template, removing the template and synthesizing double-stranded cDNAs
 PT using the cDNA as template in the presence of processive DNA polymerase
 PT and random primers.
 XX
 PS Example 1; SEQ ID NO 2; 19pp; English.
 XX
 CC The present invention relates to a method for synthesising double-

CC stranded cDNA, by synthesising first cDNA strands in a first reaction
 CC mixture comprising reverse transcriptase, RNA template, and first strand
 CC primer complementary to template, removing the template, synthesising
 CC double-stranded cDNAs in a second reaction mixture comprising processive
 CC DNA polymerase, DNA ligase, first cDNA strand as template and random
 CC primers having a mixture of oligonucleotides having random DNA sequences.
 CC Also disclosed is a method for amplifying a population of RNA molecules
 CC to produce a pool of double-stranded cDNA molecules, and a kit for
 CC synthesising double-stranded cDNA. The generated cDNA products are useful
 CC in determining quantitative information about the genetic profile of
 CC nucleic acid in original RNA sample. The method of the invention is
 CC useful in differential gene expression assays for the analysis of
 CC diseased and normal tissue and for large-scale correlation studies on
 CC sequences, mutations, variants or polymorphisms among samples. The method
 CC is efficient in synthesising improved cDNA molecules and effective in
 CC generating useful quantities of an amplified cDNA product that comprises
 CC a population of cDNA molecules in substantially the same relative molar
 CC ratio as the RNA or mRNA starting material. The present sequence
 CC represents a primer used for cDNA first strand synthesis.

XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
 |||||
 Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 368
 ADU90228/c

ID ADU90228 standard; DNA; 21 BP.

XX AC ADU90228;

XX DT 10-FEB-2005 (first entry)

XX DE Allergic response suppressor oligonucleotide #912.

XX ss; antiasthmatic; anti-allergic; dermatological; antiinflammatory;
 KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
 KW immunostimulant; asthma; rhinitis; urticaria; dermatitis;
 KW bacterial infection; viral infection.

XX OS Synthetic.

XX PN US2004235774-A1.

XX PD 25-NOV-2004.

XX PF 23-APR-2004; 2004US-00831778.

XX PR 03-FEB-2000; 2000US-0179991P.

XX PR 02-FEB-2001; 2001US-00776479.

XX PA (BRAT/) BRATZLER R L.
 PA (PETE/) PETERSEN D M.
 PA (FOUR/) FOURON Y.

XX PI Bratzler RL, Petersen DM, Fouron Y;

XX WPI; 2004-833006/82.

XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic
 PT dermatitis, in a subject, comprises administering a first and second dose
 PT of an immunostimulatory nucleic acid.

XX Disclosure; SEQ ID NO 912; 235pp; English.

XX The invention relates to a method of suppressing a symptom of an allergic
 CC response in a subject by administering a first and second dose of an

CC immunostimulatory nucleic acid that comprises a nucleotide sequence
 CC comprising 5'-cg-3', and where the second dose is administered from 1 day
 CC to 8 weeks after the first dose. The methods and compositions of the
 CC present invention are useful for the treatment or prevention of asthma
 CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
 CC an immunostimulatory nucleic acid alone or in combination with other
 CC medications. This can also be used in preventing bacterial and viral
 CC infections. This sequence represents an oligonucleotide used in the
 CC method of the invention.

XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.1e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
 |||||
 Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 369
 ADV94812/c

ID ADV94812 standard; DNA; 21 BP.

XX AC ADV94812;

XX DT 10-MAR-2005 (first entry)

XX DE Human glycosyltransferase pENTR/DTOPO vector 3' primer.

XX KW glycosyltransferase; N-acetyl-D-galactosamine; GalNac; screening; ss;
 KW PCR; primer.

XX OS Synthetic.

XX PN JP2004357635-A.

XX PD 24-DEC-2004.

XX PF 06-JUN-2003; 2003JP-00162685.

XX PR 06-JUN-2003; 2003JP-00162685.

XX PA (DOKU-) DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.

XX PA (SEKG) SEINAGAKU KOGYO CO LTD.

XX DR WPI; 2005-035730/04.

XX Novel glycosyltransferase capable of transferring N-acetyl-D-
 PT galactosamine (GalNac) residue to GalNac receptor substrate from GalNac
 PT donor substrate, useful in screening substances that promotes/inhibits
 PT glycosyltransferase activity.

XX Example 1; SEQ ID NO 6; 37pp; Japanese.

XX The invention relates to a novel glycosyltransferase capable of
 CC transferring an N-acetyl-D-galactosamine (GalNac) residue to a GalNac
 CC receptor substrate from a GalNac donor substrate. The glycosyltransferase
 CC comprises a polypeptide having sequence ADV94808 containing amino acids
 CC 43-601 or 1-601 of a fully defined sequence of 601 amino acids, as given
 CC in the specification, or ADV94808 in which one or more amino acids are
 CC substituted, deleted, inserted or rearranged. The invention further
 CC comprises: a nucleic acid encoding the 601 amino acid glycosyltransferase
 CC protein and comprising a sequence ADV94807 having bases 127-1806 or 1-
 CC 1806 of a fully defined sequence of 1806 base pairs, as given in the
 CC specification, or a sequence complementary to ADV94807; a nucleic acid
 CC capable of hybridizing under stringent conditions, with the nucleic acid
 CC that consists of the base sequence complementary to the 1806 bp
 CC polynucleotide; a vector containing the glycosyltransferase encoding DNA
 CC or its complementary sequence; a recombinant containing the vector; an
 CC antibody capable of specifically recognising the glycosyltransferase
 CC protein; an active regulator of the glycosyltransferase protein; and a

therapeutic agent of the disease caused due to change of activity of the glycosyltransferase, containing an active regulator of the glycosyltransferase protein as an active ingredient. The glycosyltransferase protein is useful in screening substances that promote or inhibit the activity of glycosyltransferase. The glycosyltransferase complementary DNA is useful as a probe for detecting in vivo expression of the glycosyltransferase DNA, and as a reagent or diagnostic for medical studies. The active regulator of the glycosyltransferase protein, is useful as the therapeutic agent for treating the disease caused due to change of activity of the glycosyltransferase protein. The glycosyltransferase protein is capable of transferring GalNAc residue to a GalNAc receptor substrate from a GalNAc donor substrate. This polynucleotide sequence represents a primer used in the exemplification of the invention.

Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
|||||

Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 370

ADV86473/C

ID ADV86473 standard; DNA; 21 BP.

XX

AC ADV86473;

XX

DT 24-MAR-2005 (first entry)

XX

DE Fluorophore-labeled biological detection oligonucleotide #6.

XX

KW Fluorophore; detection; antibody; antigen; avidin; hormone; ss.

OS Synthetic.

XX

PN US6838244-B1.

XX

PD 04-JAN-2005.

XX

PF 18-MAY-2001; 2001US-00859736.

XX

PR 19-MAY-2000; 2000US-0205452P.

XX

PA (MONS) MONSANTO TECHNOLOGY LLC.

XX

PI Li WR, Zhou JS;

XX

DR WPI; 2005-063191/07.

XX

PT Novel oligonucleotide molecule labeled with several fluorophores, useful for detecting biological molecules e.g., antibody, antigen, avidin or protein.

XX

PS Example 1; SEQ ID NO 6; 18pp; English.

XX

The invention relates to an oligonucleotide molecule (ON) labeled with several fluorophores of one or more types embedded in its backbone, where one or more of the fluorophores is not located at either the 3' or 5' terminus of ON. ON is useful for sequencing nucleic molecules. ON is useful for detecting biological molecules e.g., antibody, antigen, ON is avidin, protein, peptide, bacteria, virus, blood cell or hormone. ON is capable of providing strong fluorescence signals at different wavelengths. This sequence corresponds to an example of an oligonucleotide of the invention.

Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;

Query Match

0.8%; Score 21; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
|||||

Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 371

ADW71577

ID ADW71577 standard; DNA; 21 BP.

XX

AC ADW71577;

XX

DT 21-APR-2005 (first entry)

XX

DE Oligonucleotide DS21mer(A-T).

XX

KW DNA detection; ds.

XX

OS Unidentified.

XX

PN WO2005010177-A1.

XX

PD 03-FEB-2005.

XX

PF 20-JUL-2004; 2004WO-JP010300.

XX

PR 25-JUL-2003; 2003JP-00201500.

XX

PR 26-FEB-2004; 2004JP-00051320.

XX

PA (ONOA/) ONO A.

XX

PI Ono A;

XX

DR WPI; 2005-162557/17.

XX

PT Complex useful for detecting non-Watson Crick base pair in double stranded DNA, comprises first and second single stranded nucleic acid or

its derivative and metal ion.

XX

PS Example 1; Page 32; 73pp; Japanese.

XX

The invention relates to a complex (Cl) comprising a first and second single stranded nucleic acid or its derivative and a metal ion, where the first and second base of the strands forms a bond with metal ion. Also included are detecting the existence of thymine-thymine, cytosine-cytosine or cytosine-thymine base pair in a DNA or its analog (involving melting DNA or its analog in an aqueous medium, processing the solution for 3 minutes, to obtain three DNA solutions, dissolving Hg(II)2+ , Ag+ and combinations of Hg(II)2+ and Ag+ in the prepared DNA solutions, and comparing the characteristics of the solution, where change in characteristics in Hg(II)2+ , Ag+ and combinations of Hg(II)2+ and Ag+ represents the existence of T-T base pair, C-C base pair and C-T base pair in the respective DNA solutions) and an agent (Al) for detecting a metal ion (comprising one or more DNA molecules or their analogs having a metal binding region, where the coupling of metal ion is detected by analyzing the characteristic change in DNA). The complex (Cl) is useful as a non-Watson Crick base pair metal complex or for detecting non-Watson Crick base pair in a double stranded DNA. The complex (Cl) enables to detect non-Watson Crick base pair in a double stranded DNA. The present sequence is a 21mer double stranded oligonucleotide with no Non-Watson-Crick base pairing.

Sequence 21 BP; 21 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 6.1e+02;

Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2729

|||||

Db 1 AAAAAAAAAAAAAAAAAAAAAA 1

```
RESULT 372
ADY26140/c
ID ADY26140 standard; DNA; 21 BP.
XX
AC ADY26140;
XX
DT 05-MAY-2005 (first entry)
XX
DE Variola DNA binding triplex oligo (TFO), seq id 7.
XX
XX Virucide; anti-HIV; viral transcription; inhibitor; infection;
KW herpes keratitis; genital herpes; ds.
XX
OS Variola virus.
XX
PN US2005038238-A1.
XX
PD 17-FEB-2005.
XX
XX 21-APR-2004; 2004US-00830287.
XX
XX 21-APR-2003; 2003US-0464270P.
XX
PA (KRIE/) KRIESEL J D.
PA (JONE/) JONES B B.
PA (GRIS/) GRISSOM C B.
PA (HERP/) HERPIN G.
PA (GLAZ/) GLAZER P M.
XX
XX Kriesel JD, Jones BB, Grissom CB, Herpin G, Glazer PM;
PI WPI; 2005-172328/18.
XX
XX Interfering transcription at target site in latent virus in host cell for
PT treating viral infections comprises introducing triplex-forming
PT oligonucleotide coupled to compound that introduces transcription-
PT altering mutations in viral genome.
XX
PS Disclosure; SEQ ID NO 7; 11pp; English.
XX
XX The invention relates to interfering with transcription at a target site
CC in a latent virus in a host cell. The method comprises producing an
CC oligonucleotide capable of forming a triplex with the target site,
CC coupling the oligonucleotide to a compound (A) capable of introducing the
CC transcription-altering mutations in the viral genome, introducing the
CC coupled oligonucleotide, and reducing viral transcription from the target
CC site. The method is used for interfering with transcription at target
CC site in a latent virus, e.g. herpes viruses, JC virus, adenovirus,
CC papillomavirus and HIV, and poxviruses, e.g. cowpox, monkeypox, camelpox,
CC vaccinia, and variola in a host cell, and for effective anti-latency
CC therapy to prevent recurrences and halt progression of herpes keratitis
CC or genital herpes. The method enables control and prevention of infection
CC by latent viruses and permanently cures the latent viral infection
CC through molecular transcriptional inhibition. The current sequence
CC represents a triplex oligo (TFO) that binds target sequences in the
CC Variola virus genome.
XX
SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAA 1
RESULT 373
ADZ98948/c
ID ADZ98948 standard; RNA; 21 BP.
XX
AC ADZ98948;
XX
DT 28-JUL-2005 (first entry)
XX
DE Human KU70 transcript siRNA antisense oligonucleotide siRNA2.
XX
KW protein interaction; short interfering RNA; siRNA; RNA interference;
gene silencing; ds.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 20..21
FT /*tag= a
FT /note= "2'-deoxythymine overhang"
XX
PN US2005112118-A1.
XX
PD 26-MAY-2005.
XX
XX 20-OCT-2003; 2003US-00690276.
XX
XX 02-DEC-1999; 99US-0168377P.
XX 02-DEC-1999; 99US-0168379P.
XX 25-FEB-2000; 2000US-0185058P.
XX 01-DEC-2000; 2000US-00727384.
XX 14-DEC-2000; 2000US-0255063P.
XX 21-DEC-2000; 2000US-0256986P.
XX 04-JAN-2001; 2001US-0259571P.
XX 04-JAN-2001; 2001US-0259572P.
XX 15-MAR-2001; 2001US-0276179P.
XX 19-MAR-2001; 2001US-0277013P.
XX 23-JUL-2001; 2001US-0307233P.
XX 14-DEC-2001; 2001US-00014814.
XX 21-DEC-2001; 2001US-00024599.
XX 04-JAN-2002; 2002US-00035343.
XX 04-JAN-2002; 2002US-00035344.
XX 14-MAR-2002; 2002US-00099944.
XX 18-MAR-2002; 2002US-00100503.
XX
XX (MYRI-) MYRIAD GENETICS INC.
XX
XX Cimbara D, Heichman K, Bartel P, Mauck K, Bush A;
XX WPI; 2005-371623/38.
XX
XX Modulating, in a host cell, a protein-protein interaction between first
PT protein, PRAK (MAPKAPK5) and second protein, ERK3, (extracellular signal
PT -regulated kinase 3) by administering modulating compound.
XX
XX Disclosure; Fig 49; 296pp; English.
XX
XX The invention relates to a method for modulating, in a host cell, a
CC protein-protein interaction between a first protein which is PRAK (P38-
CC regulated/activated protein kinase or MAPKAPK5) and a second protein
CC which is ERK3 (extracellular signal-regulated kinase 3). The method
CC comprises administering to the cell a compound capable of modulating the
CC protein-protein interaction. The method is useful in modulating in a host
CC cell a protein-protein interaction between a first protein which is PRAK
CC and a second protein which is ERK3 for treating inflammation or
CC inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile
CC chronic arthritis, myositis, Crohn's disease, gastritis, colitis,
CC ulcerative colitis, inflammatory bowel disease, proctitis, pelvic
CC inflammatory disease, systemic lupus erythematosus, rhinitis,
CC conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary
CC Lyme disease, psoriasis, dermatitis or eczema. The present sequence
CC represents an siRNA (short interfering RNA) oligonucleotide targeting the
CC KU70 transcript, which is used in the exemplification of the present
CC invention.
XX
XX Sequence 21 BP; 5 A; 7 C; 2 G; 2 T; 5 U; 0 Other;
```


XX Modulating, in a host cell, a protein-protein interaction between first
PT protein, PRAK, (MAPKAPK5) and second protein, ERK3, (extracellular signal
PT -regulated kinase 3) by administering modulating compound.
XX Disclosure; Fig 49; 296pp; English.
XX
XX The invention relates to a method for modulating, in a host cell, a
CC protein-protein interaction between a first protein which is PRAK (P38-
CC regulated/activated protein kinase or MAPKAPK5) and a second protein
CC which is ERK3 (extracellular signal-regulated kinase 3). The method
CC comprises administering to the cell a compound capable of modulating the
CC protein-protein interaction. The method is useful in modulating in a host
CC cell a protein-protein interaction between a first protein which is PRAK
CC and a second protein which is ERK3 for treating inflammation or
CC inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile
CC chronic arthritis, myositis, Crohn's disease, gastritis, colitis,
CC ulcerative colitis, inflammatory bowel disease, proctitis, pelvic
CC inflammatory disease, systemic lupus erythematosus, rhinitis,
CC conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary
CC Lyme disease, psoriasis, dermatitis or eczema. The present sequence
CC represents an siRNA (short interfering RNA) oligonucleotide targeting the
CC KU70 transcript, which is used in the exemplification of the present
CC invention.
XX
XX Sequence 21 BP; 5 A; 3 C; 6 G; 2 T; 5 U; 0 Other;
SQ Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2057 AGCTTCGCTTCACATACAGA 2077
DB 21 AAGCTTCGCTTCACATACAGA 1

RESULT 376
AED13306/C
ID AED13306 standard; DNA; 21 BP.
XX
XX AED13306;
XX
XX 01-DEC-2005 (first entry)
XX
XX Oligonucleotide #8 used to illustrate nucleic acid labeling method.
DE
XX
XX DNA detection; RNA detection; SNP detection; ss.
XX
XX Synthetic.
XX
XX JP2005265617-A.
XX
XX 29-SEP-2005.
XX
XX 18-MAR-2004; 2004JP-00078900.
XX
XX 18-MAR-2004; 2004JP-00078900.
XX
XX (TAKE/) TAKENAKA S.
XX
XX Takenaka S, Nojima T, Mukumoto K, Tabata E;
XX
XX WPI; 2005-685344/71.
XX
XX Labeling double stranded nucleic acid, involves utilizing carbodiimide
PT derivative for labeling thymine, uracil and guanine, which exists in
PT mismatch region of nucleic acid or unstable region of hydrogen bond of
PT nucleic acid.
XX
XX Example 6; Page 28; 40pp; Japanese.
PS
XX The present invention relates to a method (M1) for labeling double
CC stranded nucleic acid for efficient detection of DNA or RNA. The method

CC comprises using a carbodiimide derivative for labeling one or more of
CC thymine, uracil and guanine, which exists in the mismatch region of the
CC double stranded nucleic acid or its vicinity, or unstable region of the
CC hydrogen bond of the double stranded nucleic acid. (M1) is useful for
CC labeling double stranded or single stranded nucleic acid or detecting
CC single nucleotide polymorphisms. The present sequence was used to
CC illustrate the method of the invention.
XX
XX Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
SQ Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
DB 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 377
AED75672/C
ID AED75672 standard; DNA; 21 BP.
XX
XX AED75672;
XX
XX 12-JAN-2006 (first entry)
XX
XX Immunostimulatory oligonucleotide, SEQ ID 881.
DE
XX
XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
KW Anticancer; Dermatological; Antiallergic; helper T-lymphocyte;
KW immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
KW Crohns disease; ulcerative colitis; eczema; skin allergy;
KW contact dermatitis; ss; phosphorothioate.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..21
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
XX
XX US2005250726-A1.
XX
XX 10-NOV-2005.
XX
XX 12-MAY-2005; 2005US-00127654.
XX
XX 29-MAR-2001; 2001US-0279642P.
XX
XX 29-MAR-2002; 2002US-00112653.
XX
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX Krieg AM, Berg DJ;
XX
XX WPI; 2005-768014/78.
XX
XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
PT to augment T-helper1 cells like immune activation and to treat non-
PT allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.
XX
XX Disclosure; SEQ ID NO 881; 58pp; English.
XX
XX The present invention relates to a method for augmenting T-helper 1 cells
CC (Th1)-like immune activation in a subject. The method comprises
CC administering an immunostimulatory nucleic acid (I) to induce Th1-like
CC immune activation; and administering a cyclooxygenase inhibitor (II) to
CC inhibit prostaglandin expression, is new. The present sequence is one
CC such immunostimulatory nucleic acid. (I) is useful for treating non-
CC allergic inflammatory diseases such as psoriasis, inflammatory bowel
CC diseases (Crohn's disease and ulcerative colitis), eczema, allergic
CC contact dermatitis or latex dermatitis.

```
XX SQ Sequence 21 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 0 Other;
Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 378
AEF40261
ID AEF40261 standard; cDNA; 21 BP.
XX AC AEF40261;
XX DT 23-MAR-2006 (first entry)
XX DE Poly A DNA sequence #1.
XX KW DNA amplification; DNA sequencing; gene expression; drug discovery;
XX KW diagnosis; forensic; ss.
XX OS Unidentified.
XX PN WO2006003721-A1.
XX PD 12-JAN-2006.
XX PF 02-JUL-2004; 2004WO-JP009862.
XX PR 02-JUL-2004; 2004WO-JP009862.
XX PA (DNAF-) DNAFORM KK.
XX PI Harbers M, Shibata Y;
XX WPI; 2006-100543/10.
XX PT Preparing DNA fragments comprising sequences corresponding to two
XX opposite end regions of linear nucleic acid, for e.g. analysis, comprises
XX ligating linkers, circularizing, and digesting.
XX PS Disclosure; Fig 1; 70pp; English.
XX CC The new invention relates to preparing DNA fragments comprising sequences
XX corresponding to two opposite end regions of a linear nucleic acid
XX molecule, by creating a linear DNA molecule from a nucleic acid molecule,
XX ligating linkers to two opposite ends of the linear DNA molecule,
XX circularizing the linear DNA molecule, digesting the circular DNA
XX molecule with a restriction endonuclease, and isolating the DNA fragment.
XX Also described are a vector pGSC; obtaining (M2) information on the end
XX sequences of a linear nucleic acid, comprising preparing DNA fragments by
XX (M1), preparing a concatemer by ligating the DNA fragments with each
XX other, and sequencing the concatemer so as to obtain information on the
XX end sequences of the linear nucleic acid; and priming (M3) a reverse
XX transcription reaction, by: preparing a double-stranded linker having a
XX single-stranded overhanging region, where the single-stranded overhanging
XX region is complementary to the 3' end sequence of the RNA; hybridizing
XX the single-stranded overhanging region to the complementary 3' end
XX sequence of the RNA so as to ligate the double-stranded linker to the 3'
XX end of the RNA; and letting the free 3'-end of the overhanging region of
XX the linker prime a reverse transcription reaction over the RNA with a
XX reverse transcriptase. (M1) is useful for analysis of fragments for the
XX purpose of gene identification and expression profiling and for studies
XX on biological system, characterization of genetic elements and analysis
XX the expressed genes. The identified DNA fragments are useful in drug
XX development, diagnostics or forensic studies. The present sequence is a
XX poly A DNA sequence, shown in figure 1 showing the first strand cDNA
XX priming and poly-A tail removal.
```

```
XX SQ Sequence 21 BP; 21 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.8%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 1 AAAAAAAAAAAAAAAAAAAAAA 21

RESULT 379
AAQ30432/C
ID AAQ30432 standard; DNA; 23 BP.
XX AC AAQ30432;
XX DT 25-MAR-2003 (revised)
XX DT 07-DEC-1992 (first entry)
XX DE Oligomer IL6805 for forming triplex with HUMIL6 target duplex.
XX KW Human interleukin-6 gene; herpes simplex; AIDS; modified; HIV; RSV; HPV;
XX KW malignancy; hepatitis; inflammation; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX /*mod_base= OTHER
XX /*note= "OTHER= N4 N4 ethanocytosine"
XX misc_feature 11..12
XX /*tag= d
XX /*note= "o-xyloso dimer synthon linkage"
XX misc_feature 12..23
XX /*tag= c
XX /*label= inverted polarity_region
XX /*note= "see comments"
XX modified_base 23
XX /*tag= b
XX /*mod_base= OTHER
XX /*note= "OTHER= N4 N4 ethanocytosine"
XX PN WO9209705-A1.
XX PD 11-JUN-1992.
XX PF 25-NOV-1991; 91WO-US008811.
XX PR 23-NOV-1990; 90US-00617907.
XX PR 18-JAN-1991; 91US-00643382.
XX PR 08-APR-1991; 91US-00683420.
XX PR 17-APR-1991; 91US-00686544.
XX PR 17-APR-1991; 91US-00686546.
XX PR 17-APR-1991; 91US-00686547.
XX PR 27-SEP-1991; 91US-00766733.
XX (GILB-) GILEAD SCI INC.
XX PA Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX WPI; 1992-217083/26.
XX DR New oligomers contg. modified bases - which form a triplex with G-C
XX doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX herpes malignancy and inflammation.
XX PS Claim 12; Page 71; 77pp; English.
XX CC The synthetic oligomer is capable of forming a triplex at physiological
XX pH with a purine rich target sequence by coupling into the major groove
XX of the duplex. The specific target sequence of this oligomer is the human
```

CC interleukin 6 gene untranslated sequence contg. a purine rich sequence
CC concd. on one strand of the duplex. The oligomer, and others like it are
CC useful in diagnosis and therapy of diseases characterised by specific DNA
CC duplex targets, e.g. HPV, HER, HIV, hepatitis B, herpes, malignant
CC tumours and inflammation. The triple helices form under mild conditions
CC such assays may be carried out without subjecting the test specimen to
CC harsh conditions. The oligomer contains an inverted polarity region
CC formed from an o-xylosa dimer synthon. The linking gp. is o-xylosa
CC (nucleotides have the 3' positions of xylose sugars linked via the o-
CC xylene ring). Two nucleotides are coupled through a xylene residue to
CC form the dimer synthon. This additional modifications may render the
CC oligomer stable to nuclease activity. The oligomer is able to inhibit
CC gene expression, as verified by in vitro systems. See also AAQ25452-25501
CC and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 23 BP; 0 A; 2 C; 0 G; 21 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 6.4e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
DB 22 AAAAAAAAAAAAAAAAAAAAAA 2

RESULT 380
AAA29753/c
ID AAA29753 standard; DNA; 23 BP.

AC AAA29753;

DE 15-AUG-2000 (first entry)

DE Synthetic oligonucleotide #1.

XX Primer; destabilise non-specific duplex formation; PCR; detection;
KW purification; sequencing; genetic marker; RACE; DNA synthesis; ss.
XX Synthetic.
XX

Key Location/Qualifiers
FT modified_base 8 /*tag= a
FT /*mod_base= i
FT /*note= "inosine"
FT modified_base 18
FT /*tag= b
FT /*mod_base= i
FT /*note= "inosine"

XX WO2000020630-A1.

XX 13-APR-2000.

XX 06-OCT-1999; 99WO-CA000933.

XX 07-OCT-1998; 98CA-02246623.

XX (UYMC-) UNIV MCGILL.

XX Pelletier J, Das M;

XX WPI; 2000-328943/28.

XX Novel method of stabilizing duplex formation, or destabilizing non-
PT specific duplex formation using primer containing modified nucleotide
PT analogs, useful for preventing mispriming during PCR, RACE, DNA synthesis
PT or sequencing.
XX

PS Example 1; Page 25; 46pp; English.

XX The present invention describes a method for destabilising non-specific

CC duplex formation, between an oligonucleotide and a target nucleic acid
CC (NA), comprising incubating the target NA with a modified oligonucleotide
CC (1) comprising a homopolymeric sequence having a modification which
CC decreases or abrogates H-bonding between the modified oligonucleotide and
CC the non-specific target NA. The modified oligonucleotide is used to
CC improve discrimination between the targeted homopolymeric sequence and a
CC non-homopolymeric target sequence. It is used to increase the proportion
CC of full length cDNA clones for a library, to reduce mispriming during
CC sequencing, 5' or 3' RACE (rapid amplification of cDNA ends) or DNA
CC synthesis or to generate bona fide genetic markers. The present sequence
CC represents an oligonucleotide which is used in the exemplification of the
CC present invention
XX

SQ Sequence 23 BP; 0 A; 0 C; 0 G; 21 T; 0 U; 2 Other;

Query Match 0.8%; Score 21; DB 1; Length 23;
Best Local Similarity 91.3%; Pred. No. 6.4e+02;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731

DB 23 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 381

ABK86169

ID ABK86169 standard; DNA; 24 BP.

AC ABK86169;

DE 24-SEP-2002 (first entry)

DE Oligo dT primer #2 used in method to study gene expression.

DE Oligo dT primer; gene expression analysis; primer; ss.

OS Synthetic.

PN WO200236828-A2.

PD 10-MAY-2002.

PF 01-NOV-2001; 2001WO-US045401.

PR 01-NOV-2000; 2000US-0244933P.

PA (GENO-) GENOMIC SOLUTIONS INC.

PI Kane MD, Dombkowski AA, Nagel AC;

DR WPI; 2002-508123/54.

PT Identifying and characterizing gene expression in samples, for
PT identifying mRNAs expressed at different levels, comprises employing an
PT identifier having a oligo-dT primer of a specific sequence and a
PT detectable marker at its 5' end.
XX

PS Disclosure; Page 11; 45pp; English.

XX The invention relates to systems for identification and characterisation
CC of gene expression in one or more samples, comprising an identifier having
CC a specific oligo-dT primer sequence, where the identifier comprises a
CC detectable marker at its 5' end. The system is useful for identifying any
CC or all genes expressed in a given in vivo or in vitro RNA sample, as well
CC as the relative differences in mRNA between 2 or more samples, where
CC desired, for supporting discovery of new genes, and for identifying mRNAs
CC that are expressed at different levels between 2 or more samples. The new
CC system or method addresses limitations of prior methods by comprising
CC compositions and systems that incorporate new strategies where molecular
CC or biochemical assay compositions and systems are linked to DNA or RNA
CC sequence databases for optimal resource efficiency in assaying gene
CC expression. The system has the following advantages over existing
CC methods: (a) prior sequence information or clone library construction is

CC not needed to enable the assay; (b) provides immediate sequence
 CC information in addition to information concerning changes or differences
 CC in mRNA level, to determine mRNA expression level and mRNA identification
 CC in one assay; (c) generates cDNA fragments from all mRNAs present in the
 CC sample for subsequent investigation by common molecular biology
 CC techniques; and (d) does not require prior knowledge of the sequence of
 CC the genome of the organism under investigation and can be employed in
 CC organisms lacking significant genomic sequence in formation. The present
 CC sequence represents an oligo dT primer used in the method of the
 CC invention

XX
 SQ Sequence 24 BP; 20 A; 0 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 6.5e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAA AAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 4 TAAAAA AAAAAAAAAAAAAAAAAA 24

RESULT 382
 ABK86168/c

ID ABK86168 standard; DNA; 24 BP.

AC ABK86168;

XX
 DT 24-SEP-2002 (first entry)

DE Oligo dT primer #1 used in method to study gene expression.

XX Oligo dT primer; gene expression analysis; primer; ss.

OS Synthetic.

XX
 PN WO200236828-A2.

XX 10-MAY-2002.

XX
 PF 01-NOV-2001; 2001WO-US045401.

XX
 PR 01-NOV-2000; 2000US-0244933P.

XX (GENO-) GENOMIC SOLUTIONS INC.

PA Kane MD, Dombkowski AA, Nagel AC;

PI WPI; 2002-508123/54.

DR
 XX
 XX Identifying and characterizing gene expression in samples, for
 PT identifying mRNAs expressed at different levels, comprises employing an
 PT identifier having an oligo-dT primer of a specific sequence and a
 PT detectable marker at its 5' end.

XX
 PS Disclosure; Page 11; 45pp; English.

XX
 CC The invention relates to systems for identification and characterisation
 CC of gene expression in one or more samples, comprising an identifier having
 CC a specific oligo-dT primer sequence, where the identifier comprises a
 CC detectable marker at its 5' end. The system is useful for identifying any
 CC or all genes expressed in a given in vivo or in vitro RNA sample, as well
 CC as the relative differences in mRNA between 2 or more samples, where
 CC desired, for supporting discovery of new genes, and for identifying mRNAs
 CC that are expressed at different levels between 2 or more samples. The new
 CC system or method addresses limitations of prior methods by comprising
 CC compositions and systems that incorporate new strategies where molecular
 CC or biochemical assay compositions and systems are linked to DNA or RNA
 CC sequence databases for optimal resource efficiency in assaying gene
 CC expression. The system has the following advantages over existing
 CC methods: (a) prior sequence information or clone library construction is
 CC not needed to enable the assay; (b) provides immediate sequence
 CC information in addition to information concerning changes or differences

CC in mRNA level, to determine mRNA expression level and mRNA identification
 CC in one assay; (c) generates cDNA fragments from all mRNAs present in the
 CC sample for subsequent investigation by common molecular biology
 CC techniques; and (d) does not require prior knowledge of the sequence of
 CC the genome of the organism under investigation and can be employed in
 CC organisms lacking significant genomic sequence in formation. The present
 CC sequence represents an oligo dT primer used in the method of the
 CC invention

XX
 SQ Sequence 24 BP; 3 A; 1 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.8%; Score 21; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 6.5e+02;
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAA AAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 21 TAAAAA AAAAAAAAAAAAAAAAAA 1

RESULT 383
 AAD26899

ID AAD26899 standard; DNA; 26 BP.

XX
 AC AAD26899;

XX
 DT 09-APR-2002 (first entry)

DE Bacterial PNP DNA fragment with an out-of-frame polyA tract.

XX Hypermutable organism; dominant negative allele; mismatch repair gene;

KW spontaneous mutation; DNA repair; purine nucleotide phosphorylase; PNP;

KW bacteria; ss.

XX
 OS Bacteria.

OS Unidentified.

OS Chimeric.

XX
 FH Key Location/Qualifiers

FT misc_feature 1..5
 /tag= a
 /note= "Bacterial PNP gene"

FT misc_feature 6..26
 /tag= a
 /note= "Out-of-frame polyA tract"

FT
 FT
 XX WO200188192-A2.

XX
 XX 22-NOV-2001.

XX
 PF 14-MAY-2001; 2001WO-US015376.

XX
 PR 17-MAY-2000; 2000US-0204769P.

XX
 XX (UYJO) UNIV JOHNS HOPKINS.

PA (MORE-) MORPHOTEK INC.

PA (NICO/) NICOLAIDES N C.

PA (SASS/) SASS P M.

PA (GRAS/) GRASSO L.

PA (VOGE/) VOGELSTEIN B.

PA (KINZ/) KINZLER K W.

XX
 XX Nicolaides NC, Sasse PM, Grasso L, Vogelstein B, Kinzler KW;
 PI WPI; 2002-083004/11.

XX
 DR Generating mutation in gene using cells which contain defective mismatch
 PT repair gene, useful to generate genetically altered mutations with new
 PT output traits.

XX
 PS Example 5; Fig 7; 59pp; English.

XX
 CC The patent discloses a method for generating hypermutable organisms.

CC	Dominant negative alleles of human mismatch repair genes can be used to generate hypermutable cells and organisms. They increase the rate of spontaneous mutations by reducing the effectiveness of DNA repair and thereby render the cells or animals hypermutable. The method is used to produce genetically altered organisms to produce new output traits. The present sequence is a bacterial poly purine nucleotide phosphorylase (polyPNP) DNA fragment containing an out-of-frame polya tract. This sequence is used in the exemplification of the invention
XX	
SQ	Sequence 26 BP; 22 A; 1 C; 2 G; 1 T; 0 U; 0 Other;
Query Match	0.8%; Score 21; DB 1; Length 26;
Best Local Similarity	100.0%; Pred. NO. 6.7e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	2709 AAAAAAAAAAAAAA 2729
Db	6 AAAAAAAAAAAAAA 26
RESULT 384	
AAD39650	
ID	AAD39650 standard; DNA; 26 BP.
XX	
AC	AAD39650;
XX	
DT	22-OCT-2002 (first entry)
DE	PolyPNP out-of-frame polya tract DNA.
XX	
KW	Dominant negative allele; mismatch repair gene; D-MMR; gene discovery; ITRF; inducible transcriptional regulatory element;
KW	recombinant gene mutagenesis; recombinant protein production;
KW	drug target discovery; ds.
XX	
OS	Unidentified.
XX	
PN	US200205106-A1.
XX	
PD	09-MAY-2002.
XX	
PF	14-MAY-2001; 2001US-00853646.
XX	
PR	12-MAY-2000; 2000US-0203905P.
XX	
PP	17-MAY-2000; 2000US-0204765P.
XX	
PA	(NICO// NICOLAIDES N C.
PA	(SASS// SASS P M.
PA	(GRAS// GRASSO L.
PA	(VOGE// VOGELSTEIN B.
PA	(KINZ// KINZLER K W.
XX	
PI	Nicolaides NC, Sass PM, Grasso L, Vogelstein B, Kinzler KW;
XX	
DR	WPI; 2002-499469/53.
XX	
PT	Generating a mutation in a gene using a dominant negative allele of a mismatch repair gene which results in mismatch repair deficiency in cells containing the allele is useful in gene and drug target discovery and recombinant technology.
PS	Example 5; Fig 7; 25pp; English.
XX	
CC	The invention relates to methods for generating a mutation in a gene of interest using a dominant negative allele of a mismatch repair gene (D-MMR) under control of an inducible transcriptional regulatory element (ITRE). The invention is useful to provide new cell lines that can be used for gene discovery, drug target discovery, recombinant gene mutagenesis or recombinant protein production. The present sequence is a polyPNP (purine phosphorylase) out-of-frame polya tract DNA
XX	
SQ	Sequence 26 BP; 22 A; 1 C; 2 G; 1 T; 0 U; 0 Other;

ID AAH24266 standard; DNA; 24 BP.
 AC AAH24266;
 XX
 DT 11-SEP-2001 (first entry)
 XX
 DE Human phosphatase 79 RT-PCR primer, SEQ ID NO:4.
 XX
 KW Phosphatase 79; human; BAC clone CTB-54D4-encoded protein homologue;
 KW recombinant production; malignant tumour; cancer; blood disease;
 KW HIV infection; human immunodeficiency virus; immune disorder;
 KW inflammatory condition; cytostatic; anti-HIV; antiinflammatory;
 KW immunomodulator; reverse transcription-PCR; RT-PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200138385-A1.
 XX
 PD 31-MAY-2001.
 XX
 PF 20-NOV-2000; 2000WO-CN0000459.
 XX
 PR 22-NOV-1999; 99CN-00124059.
 XX
 XX (BIOR-) BIORAD GENE DEV LTD SHANGHAI.
 PA
 PI Mao Y, Xie Y;
 XX
 DR WPI; 2001-355903/37.
 XX
 PT Human phosphatase 79 and encoded polynucleotide, applicable in diagnosis
 PT and treatment of malignant tumor, hemopathy, HIV infection, immunological
 PT diseases and various inflammation.
 XX
 PS Example 3; Page 12; 38pp; Chinese.
 XX
 CC The invention relates to human phosphatase 79 (AAB73700), nucleic acids
 CC encoding it (AAH24264), and a method for the recombinant production of
 CC human phosphatase 79. The present invention additionally discloses an
 CC agonist of phosphatase 79 for therapeutic use, and an antibody which
 CC specifically binds to human phosphatase 79. Human phosphatase 79, and
 CC nucleotides which encode it may be used for treating a variety of
 CC diseases, such as malignant tumours, blood diseases, HIV (human
 CC immunodeficiency virus) infection, immune disorders and inflammatory
 CC conditions. The protein may also be used to screen for modulators of its
 CC activity or for peptide fingerprinting identification. The polynucleotide
 CC can be used as a primer for nucleic acid amplification reaction or as a
 CC probe for hybridisation reactions, or in producing gene chips or
 CC microarrays. Sequences AAH24265-AAH24266 represent reverse transcription-
 CC PCR (RT-PCR) primers used in an exemplification of the invention to
 CC isolate human phosphatase 79 cDNA
 XX
 SQ Sequence 24 BP; 2 A; 0 C; 0 G; 22 T; 0 U; 0 Other;
 Query Match 0.8%; Score 20.8; DB 1; Length 24;
 Best Local Similarity 91.7%; Pred. No. 6.7e+02;
 Matches 22; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAAATAA 1
 RESULT 387
 ABL55130/C
 ID ABL55130 standard; DNA; 24 BP.
 XX
 AC ABL55130;
 XX
 DT 31-MAY-2002 (first entry)
 XX
 DE Human gonadotropin-releasing hormone 10 RT-PCR primer, SEQ ID NO:4.
 XX

KW Human; gonadotropin-releasing hormone 10; recombinant production; cancer;
 KW HIV infection; human immunodeficiency virus; gene therapy; cytostatic;
 KW anti-HIV; reverse transcription-PCR; RT-PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN CN1325900-A.
 XX
 PD 12-DEC-2001.
 XX
 PF 31-MAY-2000; 2000CN-00116266.
 XX
 PR 31-MAY-2000; 2000CN-00116266.
 XX
 XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.
 PA
 PI Mao Y, Xie Y;
 XX
 DR WPI; 2002-196660/26.
 XX
 PT Polypeptide-human gonadotropin-releasing hormone 10 and polynucleotide
 PT encoding it.
 XX
 PS Example 2; Page 17 (Disclosure); 32pp; Chinese.
 XX
 CC The invention relates to human gonadotropin-releasing hormone 10
 CC (AAM49158) and to nucleic acids encoding it (ABL55128). The protein has a
 CC molecular weight of 10 kD. The invention also relates to a method for the
 CC recombinant production of the protein, an antagonist of the protein, and
 CC the use of the protein, gene and antagonist in therapeutic applications.
 CC Gonadotropin-releasing hormone 10 can be used in the treatment of a
 CC variety of diseases such as cancer and HIV (human immunodeficiency virus)
 CC infection. Sequences ABL55129-ABL55130 represent reverse transcription-
 CC PCR (RT-PCR) primers used in an exemplification of the invention to
 CC isolate human gonadotropin-releasing hormone 10 cDNA
 XX
 SQ Sequence 24 BP; 1 A; 1 C; 3 G; 19 T; 0 U; 0 Other;
 Query Match 0.8%; Score 20.8; DB 1; Length 24;
 Best Local Similarity 91.7%; Pred. No. 6.7e+02;
 Matches 22; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2704 GTACTAAATAAAAAAAAAAAAAA 2727
 Db 24 GTCCCCAAAAAAAAAAAAAAAAAAAA 1
 RESULT 388
 ADY03038/C
 ID ADY03038 standard; DNA; 26 BP.
 XX
 AC ADY03038;
 XX
 DT 05-MAY-2005 (first entry)
 XX
 DE Extend primer 488 used to genotype human DPf3 SNP DNA.
 XX
 KW SNP detection; breast tumor; endocrine disease;
 KW gynecology and obstetrics; neoplasm; cytostatic; metastasis;
 KW gene therapy; RNA interference; ss; PCR; primer;
 KW D4, zinc and double PHD fingers, family 3; DPf3;
 KW guanine-nucleotide exchange factor.
 XX
 OS Homo sapiens.
 XX
 PN WO2005014846-A2.
 XX
 PD 17-FEB-2005.
 XX
 PF 27-MAY-2004; 2004WO-US016939.
 XX
 PR 24-JUL-2003; 2003US-0490234P.
 PR 25-NOV-2003; 2003US-00723681.

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PR 25-NOV-2003; 2003US-0525239P.
XX (SEQU-) SEQUENOM INC.
XX
XX Roth RB, Nelson MR, Braun A, Kammerer SM, Reneland R;
PI Hoyal-Wrightson CR;
XX WPI; 2005-163257/17.
XX
XX Identifying risk of, preventing and/or treating breast cancer by
PT identifying and/or analyzing polymorphic variations in nucleotide
PT sequences within the human genome.
XX
XX Example 16; Page 261; 617pp; English.
XX
XX The invention relates to a novel method for identifying a subject at risk
CC of breast cancer comprising detecting the presence or absence of a
CC polymorphic variation associated with breast cancer. The method of the
CC invention demonstrates cytostatic activity and may be useful for
CC identifying a risk of, preventing and/or treating breast cancer and
CC cancer metastasis. The methods may be utilized for gene therapy or RNA
CC interference. The current sequence is that of an Extend primer of the
CC invention which was used to genotype a human rho-family guanine-
CC nucleotide exchange factor D4, zinc and double PHD fingers, family 3
CC (DPF3) single nucleotide polymorphism (SNP).
XX
XX Sequence 26 BP; 0 A; 3 C; 1 G; 22 T; 0 U; 0 Other;
SQ
Query Match 0.8%; Score 20.8; DB 1; Length 26;
Best Local Similarity 91.7%; Pred. No. 6.9e+02;
Matches 22; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB ||||||||||| ||||| |||||
26 AAAAAAAAAAAAAAAAAAGAGAGAAAA 3

RESULT 389
ADG75918/c
ID ADG75918 standard; DNA; 24 BP.
XX
XX AC
XX ADG75918;
XX
XX 11-MAR-2004 (first entry)
XX Immunostimulatory non-CpG oligonucleotide IMT 173 SeqID 20.
XX
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
XX proliferation; differentiation; cytokine; antibody production; B-cell;
XX plasmacytoid dendritic cell; immunomodulator; gene therapy;
XX chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
XX renal cell carcinoma.
XX
XX Synthetic.
XX
XX WO2003101375-A2.
XX
XX 11-DEC-2003.
XX
XX 30-MAY-2003; 2003WO-EP005691.
XX
XX 30-MAY-2002; 2002CA-02388049.
XX
XX (IMMU-) IMMUNOTECH SA.
XX
XX Lopez RA;
XX
XX WPI; 2004-053333/05.
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
XX acid sequence motif, useful for inducing B-cell activation, treating,
XX preventing or ameliorating immune system disorder or tumoral disease e.g.
XX melanoma.
XX
XX Claim 14; SEQ ID NO 20; 139pp; English.
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
CC oligonucleotides (without a CpG motif), which can stimulate an immune
CC response in animals of the order of primate, including humans. The immune
CC response is characterised by the proliferation, differentiation, cytokine
CC and antibody production in B-cells, as well as cell differentiation and
CC cytokine production in plasmacytoid dendritic cells. The present
CC invention describes immunomodulator compositions that also comprise an
CC antigen selected from, for example, viruses, bacteria, parasites, tumour
CC cells and glycolipids. As such, these DNA oligos can be used in gene
CC therapy for inducing B-cell activation, treating, preventing or
CC ameliorating an immune system disorder or a tumoral disease including
CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
CC carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
CC variant DNA oligo, used in an exemplification of the invention.
XX
XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20.4; DB 1; Length 24;
Best Local Similarity 95.5%; Pred. No. 7.1e+02;
Matches 21; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
DB ||||||||||| ||||| |||||
24 AAAAAAAAAAAAAAAAAACAAAA 3

RESULT 390
ABZ23535
ID ABZ23535 standard; DNA; 25 BP.
XX
XX AC ABZ23535;
XX
XX 07-APR-2003 (first entry)
XX
XX fragment of a plasmid used to detect somatic instability.
XX
XX Replication error; drug development; somatic instability; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX misc_feature 4
XX /tag= a
XX /note= "this base represents an unspecified number of
XX bases"
XX
XX misc_feature 22
XX /tag= b
XX /note= "this base represents an unspecified number of
XX bases"
XX
XX WO200295071-A2.
XX
XX 28-NOV-2002.
XX
XX 22-MAY-2002; 2002WO-NL000322.
XX
XX 22-MAY-2001; 2001EP-00201936.
XX
XX (NEUW-) KONINK NEDERLANDSE AKAD VAN WETENSCHAPPE.
XX (TIJUS/) TIJSTERMAN M.
XX
XX Plasterk RHA, Tijsterman M;
XX
XX WPI; 2003-129440/12.
XX
XX Determining whether a product of a gene is involved in preventing a
XX replication error in a cell comprises providing a specific inhibitor for
XX the product and determining the level of expression of a marker gene.
XX

```

```

PS Example 1; Fig 3; 47pp; English.
CC The specification describes a method for determining whether a product of
CC a gene is involved in preventing a replication error in a cell. The
CC method comprises providing the cell with a specific inhibitor for the
CC product and determining the level of functional expression of a marker
CC gene in the cell, where the level of expression of the marker gene is
CC dependent on the occurrence of the replication error. The method is used
CC for determining whether a product of a gene is involved in preventing a
CC replication error in a cell. The identified genes are useful for
CC developing diagnostic tools, or as targets for drug development to
CC manipulate cells on the basis of the presence or absence of function of
CC the gene. AB223535-36 represents fragments of plasmids used to detect
CC somatic instability, in the course of the invention
XX
SQ Sequence 25 BP; 21 A; 0 C; 1 G; 1 T; 0 U; 2 Other;
    Query Match      0.7%; Score 20.4; DB 1; Length 25;
    Best Local Similarity 87.5%; Pred. No. 7.2e+02;
    Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2708 TAAAAA..... 2731
Db 2 TGNAAAAA..... 25

RESULT 391
ADR44220
ID ADR44220 standard; DNA; 25 BP.
XX
AC ADR44220;
XX
DT 04-NOV-2004 (first entry)
XX
DE Caenorhabditis elegans heat-shock promoter DNA #1.
XX
KW Nematode; gene therapy; tumour; cancer; heat-shock promoter; ss.
XX
OS Caenorhabditis elegans.
XX
FH Key Location/Qualifiers
FT misc_feature 4 /*tag= a
FT /*note= "N can be repeated X times"
FT 22
FT misc_feature /*tag= b
FT /*note= "N can be repeated Y times"
XX
FT 22
XX
DN US2004161782-A1.
XX
PD 19-AUG-2004.
XX
PF 21-NOV-2003; 2003US-00719995.
XX
PR 22-MAY-2001; 2001EP-00201936.
XX
PR 22-MAY-2002; 2002WO-NL000322.
XX
PR 28-NOV-2002; 2002WO-WO095071.
XX
PA (TIJS/) TIJSTERMAN M.
PA (PLAS/) PLASTERK R H A.
XX
PI Tijsterman M, Plasterk RHA;
XX
DR WPI; 2004-603554/58.
XX
CC Determining if a gene product/compound is involved in preventing
CC replication error in a cell, useful for treating cancer, comprises
CC determining expression level of a marker gene in a cell treated with a
CC gene product inhibitor/compound.
XX
PS Disclosure; Fig 3; 25pp; English.
XX
CC The present invention relates to a method for determining if a gene

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```

CC product or compound is involved in preventing replication error in a
CC cell. The method involves providing a cell with a specific inhibitor for
CC a gene product or with a compound and determining the expression level of
CC a marker gene in the cell, where the expression level of the marker gene
CC is dependent on the occurrence of a replication error. The invention is
CC useful in gene therapy and for treating a subject having tumours or
CC cancer. The present sequence is a Caenorhabditis elegans heat-shock
CC promoter DNA. This sequence is used to illustrate the method of
CC invention.
XX
SQ Sequence 25 BP; 21 A; 0 C; 1 G; 1 T; 0 U; 2 Other;
    Query Match      0.7%; Score 20.4; DB 1; Length 25;
    Best Local Similarity 87.5%; Pred. No. 7.2e+02;
    Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2708 TAAAAA..... 2731
Db 2 TGNAAAAA..... 25

RESULT 392
AAL50570/C
ID AAL50570 standard; DNA; 22 BP.
XX
AC AAL50570;
XX
DT 12-DEC-2002 (first entry)
XX
DE Molecular array production method-related PCR primer.
XX
KW Molecular array; ss; target molecule identification; genetic analysis;
KW gene expression; SNP detection; haplotyping; sequencing; PCR; primer.
XX
OS Unidentified.
XX
PN WO200274988-A2.
XX
PD 26-SEP-2002.
XX
PF 18-MAR-2002; 2002WO-GB001245.
XX
PR 16-MAR-2001; 2001GB-00006635.
XX
PR 02-AUG-2001; 2001GB-00018879.
XX
PA (UYCH-) UNIV CHANCELLOR MASTER & SCHOLARS OXF.
XX
PI Mir K;
XX
DR WPI; 2002-732872/79.
XX
PT Producing a molecular array with a plurality of molecules immobilized to
PT a solid substrate, useful in genetic analysis, gene expression studies or
PT the detection or typing of single nucleotide polymorphisms in a sample of
PT nucleic acids.
XX
XX Example 15; Page 122; 166pp; English.
XX
CC The invention comprises a method for producing a molecular array, the
CC method involves immobilising molecules to a solid phase at a density
CC which allows individual immobilised molecules to be individually
CC resolved. The molecular array produced by the method of the invention is
CC useful for identifying one or more target molecules in a sample. The
CC molecular array is also useful in genetic analysis, gene expression
CC studies, identifying molecules which interact with a target molecule,
CC detection/typing of single nucleotide polymorphisms, haplotyping and
CC sequencing. The present DNA sequence represents a PCR primer that was
CC used in an example of the invention
XX
SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
    Query Match      0.7%; Score 20.2; DB 1; Length 22;
    Best Local Similarity 95.2%; Pred. No. 7e+02;

```

```

Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 393
ACC4848/C
ID ACC48484 standard; DNA; 22 BP.
XX AC ACC48484;
XX DT 11-AUG-2003 (first entry)
XX DE Locked nucleic acid anchored oligo(I) primer ON14.
XX KW Locked nucleic acid; LNA; gene therapy; primer; ss.
XX OS Synthetic.
XX FH Key
XX FT modified_base
XX FT Location/Qualifiers
XX FT 1. 21
XX FT /tag= m
XX FT /mod_base= um
XX FT /note= "2'-O-methyluridine"
XX FT modified_base 1
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 3
XX FT /tag= b
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 5
XX FT /tag= c
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 7
XX FT /tag= d
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 9
XX FT /tag= e
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 11
XX FT /tag= f
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 13
XX FT /tag= g
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 15
XX FT /tag= h
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 17
XX FT /tag= i
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 19
XX FT /tag= j
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 21
XX FT /tag= k
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 22
XX FT /tag= l
XX FT /mod_base= OTHER

/note= "OTHER= Compound 17d"
WO2003020739-A2.
13-MAR-2003.
04-SEP-2002; 2002WO-IB003911.
04-SEP-2001; 2001US-0317034P.
22-SEP-2001; 2001US-0323967P.
(EXIQ-) EXIQON AS.
Wengel J, Kauppinen S;
WPI; 2003-363021/34.
Novel nucleic acid comprising a locked nucleic acid unit having a
modified base that comprises an optionally substituted carbocyclic aryl
moiety, or modified nucleobase or nucleosidic base other than
oxazole/imidazole.
Example 24a; Page 90; 119pp; English.
The present sequence is that of pyrene-anchored locked nucleic acid (LNA)
oligo(dT) primer ON14, which was used in first-strand cDNA synthesis from
eukaryotic mRNA. It includes compound '17d' at its 3' end, which is based
on an LNA-type 2'-O,4'-C-methylene-beta-D-ribofuranosyl moiety. It is
one of a set of such primers (see also ACC48482-85) that were used in an
example from the invention to demonstrate improved reverse transcription
of mRNA using pyrene-LNA anchored oligo(T) primers. The following results
were observed: efficient priming on mRNAs with short poly(A) tails;
efficient anchoring of the oligo(T) primer by pyrene-LNA and LNA-C/G/T
units resulting in an improved T20-VN anchor primer and thus avoiding
reverse transcription of long poly(A) tracts; and improved reverse
transcription of eukaryotic poly(A)+RNA directly from total RNA extracts
due to increased specificity. The invention relates to modified LNA units
that comprise unique base groups. Desirable nucleobase and nucleosidic
base substitutions can mediate universal hybridisation when incorporated
into nucleic acid strands. The novel LNA compounds can be used e.g. as
PCR primers, in sequencing, the synthesis of antisense oligonucleotides,
and in diagnostics
XX SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
Query Match 0.7%; Score 20.2; DB 1; Length 22;
Best Local Similarity 95.2%; Pred. No. 7e+02;
Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 394
ACC48485/C
ID ACC48485 standard; DNA; 22 BP.
XX AC ACC48485;
XX DT 11-AUG-2003 (first entry)
XX DE Locked nucleic acid anchored oligo(I) primer ON15.
XX KW Locked nucleic acid; LNA; gene therapy; primer; ss.
XX OS Synthetic.
XX FH Key
XX FT modified_base
XX FT Location/Qualifiers
XX FT 21
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"

```



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SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
Query Match 0.7%; Score 20.2; DB 1; Length 22;
Best Local Similarity 95.2%; Pred. No. 7e+02;
Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 396
AAD51324/c
ID AAD51324 standard; DNA; 22 BP.
XX
AC AAD51324;
XX
DT 16-APR-2003 (first entry)
XX
DE Anchored oligo dT primer used to illustrate the method of the invention.
XX
KW Laminitis; viral disease; vaccine; bacterial disease; primer; epistaxis;
KW gastritis; gastric ulcer; respiratory ailment; fracture; joint disease;
KW musculoskeletal damage; ss.
XX
OS Unidentified.
XX
PN WO200290579-A1.
XX
PD 14-NOV-2002.
XX
PF 03-MAY-2002; 2002WO-AU000553.
XX
PR 04-MAY-2001; 2001AU-00004809.
XX
PR 29-JUN-2001; 2001US-00896941.
XX
PA (GENO-) GENOMICS RES PARTNERS PTY LTD.
XX
PI Brandon RB;
XX
WPI; 2003-120558/11.
XX
PT Assessing condition e.g. athletic ability, stage of disease, presence of
PT drugs, response to exercise, response to vaccines, therapies, nutritional
PT states, of performance animal involves analyzing nucleic acid expression.
XX
PS Disclosure; Page 46; 87pp; English.
XX
CC The invention relates to a method for assessing a condition of a
CC performance animal. The method involves determining in sample abundance
CC of expressed target nucleic acid; transmitting digital sample signal to
CC remote diagnostic server; processing digital sample signal at remotely
CC located database to correlate digital signal with digital information and
CC returning report of particular condition of animal. The method is useful
CC for assessing a condition of a performance animal preferably human, dog
CC or camel. The condition can be an athletic ability and a condition that
CC enhances, hinders, impedes or does not change an expected ability of the
CC performance animal; and also normal, pre-clinical, overt progress and/or
CC stage of disease, undiagnosed of unclassified conditions, presence of
CC drugs, response to exercise, response to vaccines, therapies, nutritional
CC states and response to environmental conditions. Diseases assessed by the
CC invention include laminitis, lameness, viral or bacterial disease,
CC gastritis, gastric ulcers, respiratory ailments, fractures, epistaxis,
CC musculoskeletal damage or disorders and joint diseases. The present
CC sequence is a primer used to illustrate the method of the invention
XX
SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 22;
Best Local Similarity 95.2%; Pred. No. 7e+02;
Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 398
ABX74887/c
ID ABX74887 standard; DNA; 22 BP.
XX
AC ABX74887;
XX
DT 21-MAR-2003 (first entry)
XX
DE Oligo-dT primer used in human CC-RCC invention.
XX
KW Microarray; solid surface; immobilised probe; CC-RCC;
KW differential expression profile; aggressive CC-RCC tumour type;
KW non-aggressive CC-RCC tumour type; clear cell renal carcinoma;
```

gene expression profiling; tumour tissue; oligo-dt; primer; ss.

Synthetic.

WO200279411-A2.

10-OCT-2002.

29-MAR-2002; 2002WO-US009576.

29-MAR-2001; 2001US-0279411P.

(VAND-) VAN ANDEL INST.

Haab B, Rhodes D, Teh BT, Takashi M;

WPI; 2003-040679/03.

New microarray, comprising a matrix of cDNA probe from a set of probes immobilized to a solid surface in predetermined order, useful in the prognosis of patients with clear cell renal carcinoma.

Example 2; Page 30; 179pp; English.

The present invention relates to a microarray comprising a matrix of at least one cDNA probe from a set of probes immobilised to a solid surface in a predetermined order, where a row of pixels corresponds to replicates of one distinct probe from the set. The probes are complementary to nucleic acid sequences that are expressed differentially in aggressive as compared to non-aggressive types of clear cell renal carcinoma (CC-RCC) and that hybridise to the probes under high stringency conditions. The microarray is useful for the prognosis of patients with CC-RCC, wherein aggressive and non-aggressive CC-RCC tumour types are characterised by differential expression profiles of genes that hybridise with one or more probes immobilised on the microarray. The arrays are useful for gene expression profiling of tumour and normal tissues. The present sequence represents an oligo-dt primer used in the examples of the present invention

Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 22;

Best Local Similarity 95.2%; Pred. No. 7e+02;

Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAATAAAAA 2728

:|||||

21 BAAAAAATAAAAAATAAAAA 1

RESULT 399

ADI34007/C

ID ADI34007 standard; DNA; 22 BP.

AC ADI34007;

22-APR-2004 (first entry)

RNA extraction anchored oligonucleotide primer.

ss; cancer; neuroblastoma; rhabdomyosarcoma; Burkitt's tumour family; Ewing tumour family; primer.

Synthetic.

US2004009154-A1.

15-JAN-2004.

31-MAY-2002; 2002US-00159563.

25-APR-2002; 2002US-00133937.

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(KHAN/) KHAN J.

(RING/) RINGNER M.

(PETE/) PETERSON C.

(MELT/) MELTZER P.

Khan J, Ringner M, Peterson C, Meltzer P;

WPI; 2004-167702/16.

Selecting genes expressed in cancer cell, by characterizing cancer based

on functioning of gene selection by comparing expression of selected gene

from cancer cell with expression of selected genes from noncancerous

cell.

Example 2; Page 18; 53pp; English.

The invention relates to a method of selecting genes expressed in a

cancer cell, which involves characterising cancer based on the

functioning of gene selection by comparing the expression of the selected

gene from the cancer cell with the expression of an identical selection

of genes from a noncancerous cell or different type of cancer cell. The

method is useful for selecting genes expressed in a cancer cell. The

method is useful for targeting the therapy of cancer by using a selection

of genes or their products expressed in a cancer cell, the gene selection

or a selection of product functioning to characterising cancer by

comparing the expression of the selected gene or their products from the

cancer cell with the expression of an identical selection of genes or

their products noncancerous. The method is also useful for diagnosing,

prognosing, monitoring and classifying a disease condition e.g. cancer

such as neuroblastoma, rhabdomyosarcoma, Burkitt's or Ewing family of

tumours. The present sequence represents an anchored oligonucleotide

CC primer used to extract RNA from cells.

XX Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 22;

Best Local Similarity 95.2%; Pred. No. 7e+02;

Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAATAAAAA 2728

:|||||

21 BAAAAAATAAAAAATAAAAA 1

RESULT 400

ADL97794/C

ID ADL97794 standard; DNA; 22 BP.

XX ADL97794;

17-JUN-2004 (first entry)

Oligonucleotide probe.

ss; primer; molecular array.

Unidentified.

WO2004027093-A1.

01-APR-2004.

19-SEP-2003; 2003WO-GB004041.

19-SEP-2002; 2002GB-00021792.

26-SEP-2002; 2002GB-00022412.

(UYCH-) UNIV CHANCELLOR MASTER & SCHOLARS OXF.

Mir K;

WPI; 2004-295431/27.

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XX

PT Producing molecular array by immobilizing to solid phase several known
PT molecules at low density for allowing individual immobilized molecules to
XX be individually resolved and spatially addressable.

PS Disclosure; Page 152; 219pp; English.

XX
CC The invention relates to a method of producing (M1) a molecular array,
CC involves: immobilizing to a solid phase a several molecules at a density
CC which allows individual immobilized molecules to be individually
CC resolved, where each molecule in the array is spatially addressable and
CC the identity of each molecule is known or determined prior to
CC immobilization; and optionally providing a molecular array comprising a
CC several molecules immobilized to a solid phase at a density such that
CC individual immobilized molecules are not capable of being individual
CC resolved, and reducing the density of functional immobilized molecules in
CC the array such that remaining individual functional immobilized molecules
CC are capable of being individually resolved, where each individual
CC functional molecule in the resulting array is spatially addressable and
CC the identity of each molecule is known or determined prior to the density
CC reduction step. The array efficiently resolve complex samples, separate
CC correct signals from erroneous signals, eliminates need for sample
CC amplification, detects transient interactions or temporal characteristic
CC of single molecule processes. This sequence represents an oligonucleotide
CC used in the method of the invention.

XX Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 22;

Best Local Similarity 95.2%; Pred. No. 7e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 20; Conservative 1;

QY 2708 TAAAAA AAAAAAAAAAAAAA 2728

Db 21 BAAAAA AAAAAAAAAAAAAA 1

RESULT 401

ADSI3095/c

ID ADSI3095 standard; DNA; 22 BP.

XX
AC ADSI3095;

DT 02-DEC-2004 (first entry)

XX Oligo dT PCR primer used in the cloning of PON1 genes Seq 11.

XX PCR; primer; ss; paraoxonase; PON1; praonox; nerve agent; sarin; soman;
XX in vitro evolution; hyperlipidaemia; atherosclerosis;
XX neurological disease; Alzheimer's disease; neurofibromatosis;
XX Huntington's disease; stroke; depression; amyotrophic lateral sclerosis;
XX multiple sclerosis; Parkinson's disease; multi-infarct dementia;
XX cancer; organophosphate poisoning; antilipemic; antiarteriosclerotic;
XX neuroprotective; nootropic; cytostatic; anticonvulsant; antidepressant;
XX antiparkinsonian; antidote.

OS Synthetic.

XX WO2004078991-A2.

XX 16-SEP-2004.

XX 04-MAR-2004; 2004WO-IL000216.

XX 04-MAR-2003; 2003US-0451267P.

XX 22-OCT-2003; 2003US-0512925P.

XX (YEDA) YEDA RES & DEV CO LTD.

XX Tawfik DS, Aharoni A, Gaydukov L, Suesman JL, Silman I;

PI WPI; 2004-668627/65.

XX Novel mutant of PON enzyme exhibiting increased substrate specificity to

PT PON substrate, useful for treating or preventing PON1-related diseases
PT e.g., hyperlipidemia, atherosclerosis, neurological disease or cancer.

XX Example 1; SEQ ID NO 11; 240pp; English.

XX This invention relates to novel mutant serum paraoxonase (PON1) nucleic
CC acid molecules and the encoded proteins thereof. Specifically, it refers
CC to enzymes that are calcium dependent phosphotriesterases essential to
CC the detoxification process of organophosphates such as the insecticide
CC praonox and the nerve agents sarin and soman. The present invention
CC describes a method to identify mutated PONs that exhibit substantially
CC identical (or improved) substrate specificity in comparison with the wild
CC type PON and also those mutants that do not form aggregates when
CC expressed in bacteria. In particular, the method employed an in vitro
CC evolution process to identify proteins with desired traits such as
CC structural plasticity, catalytic activity and maintaining substrate
CC binding. These mutants have been found to be useful for treating or
CC preventing PON1-related diseases including hyperlipidaemia,
CC atherosclerosis, neurological disease (e.g. Alzheimer's disease,
CC neurofibromatosis, Huntington's disease, depression, amyotrophic lateral
CC sclerosis, multiple sclerosis, stroke, Parkinson's disease or multi-
CC infarct dementia), cancer and organophosphate poisoning. Accordingly,
CC they exhibit antilipemic, antiarteriosclerotic, neuroprotective,
CC nootropic, cytostatic, anticonvulsant, antidepressant and
CC antiparkinsonian activities, as well as being an antidote in a case of
CC poisoning. This oligonucleotide sequence is a PCR primer used for the
CC cloning and expression of a wild type PON1 gene of the invention.

XX Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 22;

Best Local Similarity 95.2%; Pred. No. 7e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 20; Conservative 1;

QY 2708 TAAAAA AAAAAAAAAAAAAA 2728

Db 21 BAAAAA AAAAAAAAAAAAAA 1

RESULT 402

ADY30380/c

ID ADY30380 standard; DNA; 22 BP.

XX
AC ADY30380;

XX 05-MAY-2005 (first entry)

XX PCR primer to amplify the 5' CDS of rice Xa31 cDNA by RACE PCR Seq 23b.

XX plant; disease resistance; crop improvement; transfection;
XX transgenic plant; bacterial blight disease; primer; ss; PCR; RACE.

XX Oryza sativa.

XX WO2005017158-A1.

XX 24-FEB-2005.

XX 13-AUG-2003; 2003WO-SG0000191.

XX 13-AUG-2003; 2003WO-SG0000191.

XX (TEMA-) TEMASEK LIFE SCI LAB.

XX Yin ZC, Wang G, Tian DS, Gu KY;

XX WPI; 2005-182374/19.

XX New isolated nucleic acid sequence that provides resistance to plants,
PT useful for making transgenic plants that are resistant to bacterial
PT blight disease caused by Xanthomonas.

XX Example 7; Page 35; 93pp; English.

XX This invention relates to a novel nucleic acid molecule that provides a
 CC plant with resistance to Xanthomonas when transfected into that plant.
 CC Specifically, it refers to a method of generating a plant that is
 CC resistant to Xanthomonas by transfecting the resistance gene Xa31 into
 CC the plant or transfecting Xa31 into a plant cell (or cells) and growing a
 CC plant thereof. The present invention describes an appropriate vector
 CC comprising a plant promoter operably linked to the nucleic acid, which
 CC can be used to produce the transgenic plant, preferably transgenic rice.
 CC As such, Xa31 acid is useful for generating transgenic plants that are
 CC resistant to bacterial blight disease caused by the bacterium
 CC Xanthomonas. This oligonucleotide sequence is a PCR primer given in an
 CC exemplification of the invention. NOTE: This sequence taken from example
 CC 7 differs from that given in the sequence listing of the specification.

XX SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;
 Query Match 0.7%; Score 20.2; DB 1; Length 22;
 Best Local Similarity 95.2%; Pred. No. 7e+02; Indels 0; Gaps 0;
 Matches 20; Conservative 1; Mismatches 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2728
 :|||||
 Db 21 BAAAAAATAAAAAAAAAA 1

RESULT 403
 ABK13916/c
 ID ABK13916 standard; DNA; 23 BP.
 AC ABK13916;
 XX
 DT 21-MAY-2002 (first entry)
 XX
 DE 3'-PCR primer used in method of identifying transcribed genes.
 XX
 KW Identification of transcribed gene; mRNA profile; gene expression;
 KW cellular process; fingerprinting; susceptibility to external factor;
 KW development; disease; PCR; primer; ss.
 XX
 OS Synthetic.
 XX
 XX WO200208461-A2.
 XX
 PD 31-JAN-2002.
 XX
 XX 23-JUL-2001; 2001WO-IB001539.
 PF
 XX
 XX 21-JUL-2000; 2000GB-00018016.
 PR
 XX 21-JUL-2000; 2000US-0219925P.
 PR
 XX (GLOB-) GLOBAL GENOMICS AB.
 PA
 XX
 XX Linnarsson S, Ernfors P, Bauren G;
 PI
 XX WPI; 2002-217065/27.
 DR
 XX
 XX Providing mRNA profile, by generating two independent patterns
 PT characteristic of sample mRNA population, analyzing patterns, comparing
 PT gene expression by cell types under varied conditions, and identifying
 PT genes.
 XX
 XX Example 2; Page 45; 67pp; English.
 PS
 XX
 XX The present invention relates to a method for providing a profile of mRNA
 CC molecules present in a sample. The method comprises generating two
 CC independent patterns characteristic of the population of mRNA molecules
 CC expressed in the sample and analysing the patterns using a combinatorial
 CC algorithm, comparing gene expression by different or same cell types
 CC under different conditions, and identifying genes having a role in
 CC various cellular processes. The method is useful for the analysis and
 CC identification of transcribed genes, and fingerprinting. The method can
 CC be used to identify genes which play a role in determining various

CC cellular processes, including susceptibility to external factors,
 CC development, and disease. The present sequence for a PCR primer is used
 CC in the methods of the present invention

XX SQ Sequence 23 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 3 Other;
 Query Match 0.7%; Score 20.2; DB 1; Length 23;
 Best Local Similarity 95.2%; Pred. No. 7.1e+02;
 Matches 20; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 XX

Qy 2708 TAAAAAATAAAAAAAAAA 2728
 :|||||
 Db 21 BAAAAAATAAAAAAAAAA 1

RESULT 404
 AAC96256/c
 ID AAC96256 standard; DNA; 25 BP.
 XX
 AC AAC96256;
 XX
 DT 26-FEB-2001 (first entry)
 XX
 DE HLA DPA1 gene PCR primer #13.
 XX
 KW DNA sequence analysis; sequencing; protein sequence; protein structure;
 KW gene typing; organ donation; bacteria identification; 16S rRNA; HLA;
 KW human leukocyte antigen; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200065088-A2.
 PN
 XX 02-NOV-2000.
 PD
 XX 20-APR-2000; 2000WO-EP003636.
 PF
 XX 26-APR-1999; 99EP-00303215.
 PR
 XX (AMSH) AMERSHAM PHARMACIA BIOTECH AB.
 PA
 XX Ulfendahl P, Wong K;
 PI
 XX WPI; 2000-679677/66.
 DR
 XX
 XX Identifying extendible primers for use in identification, or
 PT classification of a nucleic acid of an organism, allele or gene such as
 PT class 1/2 HLA comprises identifying all possible nucleotide sequences of
 PT specific length.
 XX
 XX Claim 14; Page 48; 66pp; English.
 PS
 XX
 XX The present invention provides a method for identifying a set of
 CC extendible primers which can be used in the identification, typing and
 CC classification of genes. This can then be used to predict protein
 CC sequence and structure, in organ donation to match the organ with the
 CC receiver, and to identify bacteria in a sample. The method can be used to
 CC type the human leukocyte antigen genes (HLA) and 16S rRNA genes in
 CC particular
 XX
 XX SQ Sequence 25 BP; 3 A; 2 C; 3 G; 17 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20.2; DB 1; Length 25;
 Best Local Similarity 88.0%; Pred. No. 7.4e+02;
 Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 XX

Qy 2700 GTTGTACTAAAAAATAAAAAAAAAA 2724
 |||||
 Db 25 GTCTGTACAAACAAAAAATAAAAAAAAAA 1

RESULT 405
 ABA03917/c

```

ID  ABA03917 standard; DNA; 25 BP.
XX
AC  ABA03917;
XX
DT  18-FEB-2002 (first entry)
XX
DE  Human connexin 9 PCR primer 2 SEQ ID NO:4.
XX
KW  Human; connexin 9; cytostatic; virucidal; immunomodulatory;
KW  antiinflammatory; haemostatic; malignant tumour; haemopathy;
KW  HIV infection; immunological disease; inflammation; PCR primer; ss.
XX
OS  Homo sapiens.
XX
PN  WO200181538-A2.
XX
PD  01-NOV-2001.
XX
PF  23-APR-2001; 2001WO-CN000608.
XX
PR  27-APR-2000; 2000CN-00115456.
XX
PA  (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.
XX
PI  Mao Y, Xie Y;
XX
WI  WPI; 2002-034440/04.
XX
DR  Human connexin 9 and encoded polynucleotide, applicable in diagnosis and
PT  treatment of malignant tumor, hemopathy, HIV infection, immunological
PT  diseases and inflammation.
XX
PS  Example 2; Page 12; 32pp; Chinese.
XX
CC  The present invention describes human connexin 9 (I). (I) has cytostatic,
CC  virucidal, immunomodulatory, antiinflammatory and haemostatic activities.
CC  (I) and the polynucleotide encoding it (II) are applicable in the
CC  diagnosis and treatment of malignant tumour, haemopathy, HIV infection,
CC  immunological diseases and various inflammations. The present sequence
CC  represents a PCR primer for human connexin 9, which is used in an example
CC  from the present invention
XX
SQ  Sequence 25 BP; 3 A; 0 C; 1 G; 21 T; 0 U; 0 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 25;
Best Local Similarity 88.0%; Pred. No. 7.4e+02;
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY  2708 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2732
DB  25 TAAAAAAAAATAAATAAAAAAAAAACA 1

RESULT 406
ADO81067/c
ID  ADO81067 standard; DNA; 25 BP.
XX
AC  ADO81067;
XX
DT  29-JUL-2004 (first entry)
XX
DE  Cow prion protein microsatellite locus primer #79.
XX
KW  Gene typing; polymorphic microsatellite loci; PML;
KW  disease predisposition; microsatellite marker; prion disease;
KW  cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
KW  milk protein; hormone; transcription factor; pT7-blue-vector; cow;
KW  microsatellite; PCR; primer; ss.
XX
OS  Bos taurus.
XX
PN  DE10236711-A1.
XX

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```

PD  26-FEB-2004.
XX
PF  09-AUG-2002; 2002DE-01036711.
XX
PR  09-AUG-2002; 2002DE-01036711.
XX
PA  (UYHO-) UNIV HOHENHEIM.
XX
PI  Geldermann H, Preuss S, Han Y;
XX
WI  WPI; 2004-215730/21.
XX
DR  Typing genes that contain polymorphic microsatellite loci, useful for
PT  identifying predisposition to disease, by amplification and determining
PT  length of amplicons.
XX
PS  Example 3; Page 28; 64pp; German.
XX
CC  The invention describes a method of typing (M1) a gene (I) that has one
CC  or more polymorphic microsatellite loci (PML). The method comprises: PCR
CC  amplification of at least one DNA region of (I) that includes PML, using
CC  as template a DNA sample containing at least one segment of (I); and
CC  determining the length of the resulting amplicon(s). Also described are:
CC  a method of determining (M2) microsatellite markers (MM) for
CC  predisposition to a disease, associated with a gene that includes one or
CC  more PML; and prediagnosis (M3) of diseases associated with gene that
CC  include PML. The method is used to identify microsatellite markers, in a
CC  disease-related gene, that are associated with a predisposition to
CC  diseases and for prediagnosis of such diseases, especially prion diseases
CC  but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
CC  metabolic diseases; also to type genes that encode milk proteins,
CC  hormones or transcription factors. The method is simpler, quicker and
CC  particularly less expensive than known methods based on sequencing. This
CC  sequence represents a primer used to genotype a region of the cow prion
CC  protein (PrP) comprising a polymorphic microsatellite locus.
XX
SQ  Sequence 25 BP; 0 A; 3 C; 0 G; 22 T; 0 U; 0 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 25;
Best Local Similarity 88.0%; Pred. No. 7.4e+02;
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2733
DB  25 AAAAAAAAAAGAGAGAGAGAGAGAGAGAGAG 1

RESULT 407
ADO81060/c
ID  ADO81060 standard; DNA; 25 BP.
XX
AC  ADO81060;
XX
DT  29-JUL-2004 (first entry)
XX
DE  Cow prion protein microsatellite locus primer #72.
XX
KW  Gene typing; polymorphic microsatellite loci; PML;
KW  disease predisposition; microsatellite marker; prion disease;
KW  cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
KW  milk protein; hormone; transcription factor; pT7-blue-vector; cow;
KW  microsatellite; PCR; primer; ss.
XX
OS  Bos taurus.
XX
PN  DE10236711-A1.
XX
PD  26-FEB-2004.
XX
PF  09-AUG-2002; 2002DE-01036711.
XX
PR  09-AUG-2002; 2002DE-01036711.
XX

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PA (UVHO-) UNIV HOHENHEIM.
XX
XX Geldermann H, Preuss S, Han Y;
XX WPI; 2004-215730/21.
XX
XX Typing genes that contain polymorphic microsatellite loci, useful for
XX identifying predisposition to disease, by amplification and determining
XX length of amplicons.
XX
XX Example 3; Page 28; 64pp; German.
XX
XX The invention describes a method of typing (M1) a gene (I) that has one
XX or more polymorphic microsatellite loci (PML). The method comprises: PCR
XX amplification of at least one DNA region of (I) that includes PML, using
XX as template a DNA sample containing at least one segment of (I); and
XX determining the length of the resulting amplicon(s). Also described are:
XX a method of determining (M2) microsatellite markers (MM) for
XX predisposition to a disease, associated with a gene that includes one or
XX more PML; and prediagnosis (M3) of diseases associated with gene that
XX include PML. The method is used to identify microsatellite markers, in a
XX disease-related gene, that are associated with a predisposition to
XX diseases and for prediagnosis of such diseases, especially prion diseases
XX but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
XX metabolic diseases; also to type genes that encode milk proteins,
XX hormones or transcription factors. The method is simpler, quicker and
XX particularly less expensive than known methods based on sequencing. This
XX sequence represents a primer used to genotype a region of the cow prion
XX protein (PrP) comprising a polymorphic microsatellite locus.
XX
XX Sequence 25 BP; 0 A; 3 C; 0 G; 22 T; 0 U; 0 Other;

Query Match 0.7%; Score 20.2; DB 1; Length 25;
Best Local Similarity 88.0%; Pred. No. 7.4e+02;
Matches 22; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2733
Db 25 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 408
AAQ25565/C
ID AAQ25565 standard; DNA; 20 BP.
XX
XX AAQ25565;
XX
XX 25-MAR-2003 (revised)
XX 02-DEC-1992 (first entry)
XX
XX Dye-coupled 3'-amino modified oligonucleotide.
XX
XX DNA synthesis; RNA; antisense strands; detection; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 20
XX /*tag= a
XX /*note= "3-amino modified"
XX
XX EP490281-A1.
XX
XX 17-JUN-1992.
XX
XX 06-DEC-1991; 91EP-00120935.
XX
XX 11-DEC-1990; 90DE-04039488.
XX
XX (FARH ) HOECHST AG.
XX
XX Engels J, Herrlein M, Konrad R, Mag M;
XX

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DR WPI; 1992-201578/25.
XX
XX New dye-coupled modified nucleosides, nucleotides and oligo:nucleotides -
XX useful for synthesis of antisense DNA and RNA strands in presence of
XX template, also for in-vivo and in-vitro detection of genetic material.
XX
XX Example; Page 9; 17pp; German.
XX
XX The sequence is an example of a dye coupled 3'-amino modified oligo-
XX nucleotide, it can be used in the synthesis of DNA and RNA nucleosides,
XX nucleotides and oligonucleotides and for the synthesis of opposite
XX strands in the presence of a template strand and in fluorescence
XX microscopic and macroscopic detection in vivo and in vitro of genetic
XX material. It is labelled with a fluorescent dye. See also AAQ25566 and
XX AAQ25567. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 409
AAQ33554/C
ID AAQ33554 standard; DNA; 20 BP.
XX
XX AAQ33554;
XX
XX 25-MAR-2003 (revised)
XX 02-FEB-1993 (first entry)
XX
XX Microsatellite sequence from clone AGLA247.
XX
XX PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;
XX genetic mapping; traits; amplification; ss.
XX
XX Bos taurus.
XX
XX WO9213102-A1.
XX
XX 06-AUG-1992.
XX
XX 15-JAN-1992; 92WO-US000340.
XX
XX 15-JAN-1991; 91US-00642342.
XX
XX (GENM-) GENMARK.
XX
XX Georges M, Massey JM;
XX
XX WPI; 1992-284684/34.
XX
XX Polymorphic bovine DNA markers - used in genetic identification, gene
XX mapping, and selective breeding.
XX
XX Table 7; Page 150; 517pp; English.
XX
XX The sequence is that of a bovine microsatellite sequence obt'd. by
XX screening a library of bovine MboI DNA fragments of between 250 and 500
XX bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50
XX clones cross-hybridised. Assuming independent distribution of
XX microsatellites and MboI sites, the frequency of (76)n >9 microsatellites
XX in the bovine genome is estimated at >100, 000. The sequence information
XX for ca. 230 such bovine microsatellites is summarised in the
XX specification and indexed herein (see below). The sequences upstream and
XX downstream of the microsatellite sequence were used to generate the
XX required PCR primers for in vitro amplification of the corresp.
XX microsatellite (using the program OPTIPRIM). The microsatellites may be

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CC used to identify individuals, for parentage testing, and in the genetic
 CC mapping of economic trait loci, or genes involved the determinism of
 CC economically important traits esp. in cattle, to allow selective
 CC breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN
 CC field.)
 CC
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 410
 AAQ58578
 ID AAQ58578 standard; RNA; 20 BP.
 XX
 AC AAQ58578;
 XX
 DT 25-MAR-2003 (revised)
 DT 21-AUG-1994 (first entry)
 XX
 DE Sequence of synthetic RNA oligo which is a target nucleotide for a novel
 DE receptor.
 XX
 KW Novel receptor; nucleic acid; transport; oligo; ss.
 XX
 OS Synthetic.
 OS
 PN WO9404194-A1.
 XX
 PD 03-MAR-1994.
 XX
 PF 13-AUG-1993; 93WO-US007603.
 XX
 PR 14-AUG-1992; 92US-00930087.
 XX
 PA (MASI) MASSACHUSETTS INST TECHNOLOGY.
 XX
 PI Usman N, Rebek J, De Mendoza J;
 XX
 XX WPI; 1994-082846/10.
 XX
 XX Transport of nucleic acid deriva. across membranes - using new receptors
 PT which use salt bridging, aromatic stacking, hydrogen bonding and
 PT chelation.
 XX
 PS Example; Table 1, page 38; 103pp; English.
 XX
 CC The inventors claim a method of transporting a nucleic acid deriv. accross
 CC a membrane which comprises using a receptor that uses salt bridgin,
 CC aromatic stacking, H bonding and chelation to recognise the nucleic acid
 CC deriv. AAQ56305, AAQ58577-86 are nucleic acid derivs used in the
 CC examples. (Updated on 25-MAR-2003 to correct PN field.)
 CC
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 411
 AAQ94205/C
 ID AAQ94205 standard; DNA; 20 BP.

XX AAQ94205;
 AC
 XX 25-MAR-2003 (revised)
 DT 24-AUG-1995 (first entry)
 XX
 DE Alpha-anomeric oligonucleotide ligand 1803 for oestradiol hapten.
 XX
 KW Oligonucleotide ligand; steroid hormone; hapten; immobilisation;
 KW immunodetection; estradiol; alpha-anomer; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_feature 1..21
 FT /*tag= b
 FT /note= "the glycosidic bonds between nucleotides are all
 FT in the alpha-anomer form"
 FT modified_base 20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "carries a group derived ffrom aminopropanediol"
 FT
 XX WO9429723-A1.
 PN
 XX 22-DEC-1994.
 PD
 XX 10-JUN-1994; 94WO-FR000689.
 PF
 XX 11-JUN-1993; 93FR-00007093.
 PR
 XX (CROS/) CROS P.
 PA (KURF/) KURFURST R.
 PA (BATT/) BATTAIL N.
 PA (PIGA/) PIGA N.
 XX
 PI Cros P, Kurfurst R, Battail N, Piga N;
 XX
 XX WPI; 1995-036665/05.
 DR
 XX Assay device for hapten or its specific antibodies - comprises support
 PT having competitive reagent immobilised via nucleic acid ligand to improve
 PT orientation and accessibility.
 XX
 PS Example 1; Page 10; 39pp; French.
 XX
 CC Oligonucleotides (AAQ94201-Q94205) were synthesised for use as ligands.
 CC The ligands are covalently linked to a hapten (esp. a steroid hormone) to
 CC form a conjugate which is then immobilised on a solid support for
 CC interaction with antibodies against the hapten. Nucleic acid ligands are
 CC less likely to be recognised by the antibodies than are peptide ligands
 CC and nucleic acids are also less likely to undergo intramolecular
 CC organisation which interferes with accessibility of the hapten to the
 CC antibodies. For immunodiagnosis of oestradiol, the active hapten
 CC oestradiol-6-carboxymethoxime-N- hydroxy succinimide ester was used.
 CC (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 412
 AAQ75577/C
 ID AAQ75577 standard; DNA; 20 BP.
 XX
 XX AAQ75577;
 AC

```

XX 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2706 ACTAAAAAAAAAAAAAAAAA 2725
Db 20 ACTAAAAAAAAAAAAAAAAA 1

RESULT 413
AAQ90405/C
ID AAQ90405 standard; DNA; 20 BP.
XX
XX AAQ90405;
XX
XX 08-JAN-1996 (first entry)
XX
XX T2 (synthetic DNA probe with 5' amino terminal #4).
XX
XX T2; HLA; dQa; self-addressable electronic device; SAED; hybridisation;
KW ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1
FT /*tag= a
FT /note= "3' aminolink2 Thymine; allows binding to any
FT amine"
XX
XX WO9512808-A1.
XX
XX 11-MAY-1995.
XX
XX 26-OCT-1994; 94WO-US012270.

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XX 01-NOV-1993; 93US-00146504.
XX
XX (NANO-) NANOGEN INC.
XX
XX Heller MJ, - Tu E;
XX
XX WPI; 1995-185870/24.
XX
XX New self-addressable electronic devices - used for multi-step and
PT multiplex reactions such as DNA hybridisation(s), clinical diagnostics
PT and bio-polymer synthesis.
XX
XX Example 1; Page 41; 86pp; English.
XX
XX The sequences represented by, AAQ90402-15 are synthetic DNA probes
CC containing 5' amino termini. The sequences shown in AAQ90390-401 are
CC synthetic DNA probes with 3' ribonucleoside termini. These sequences were
CC specific for the polymorphisms of HLA gene dQa. The sequences were used
CC in the device of the invention. This is a self-addressable electronic
CC device (SAED) that can be used to carry out multi-step and multiplex
CC reactions, such as nucleic acid hybridisations. The advantages of this
CC method are that these reactions can be carried out with complete and
CC precise electronic control, and that the rate, specificity and
CC sensitivity of these reactions are greatly improved at micro-locations
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 414
AAT04916/C
ID AAT04916 standard; cDNA; 20 BP.
XX
XX AAT04916;
XX
XX 25-MAR-2003 (revised)
DT 15-MAY-1996 (first entry)
XX
XX Mammalian stem cell factor (SCF) cDNA oligonucleotide primer 220-7.
XX
XX Stem cell factor; progenitor; haematopoiesis; SCF; anaemia;
KW thrombocytopenia; leucopenia; AIDS; immunodeficiency; bone graft;
KW transplant; neoplasia; myelosuppression; bone marrow; ss.
XX
XX Synthetic.
XX
XX BP676470-A1.
XX
XX 11-OCT-1995.
XX
XX 04-OCT-1990; 95EP-00105391.
XX
XX 16-OCT-1989; 89US-00422383.
XX
XX 11-JUN-1990; 90US-00537198.
XX
XX 24-AUG-1990; 90US-00573616.
XX
XX 28-SEP-1990; 90WO-US005548.
XX
XX 01-OCT-1990; 90US-00589701.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zsebo KM, Suggs SV, Bosselman RA, Martin FH;
XX
XX WPI; 1995-346090/45.
XX
XX New stem cell factor polypeptide(s) - for stimulating the growth of

```

PT primitive progenitor cells, esp. for treating disorders involving blood cells.

PS Example 3; Fig 12C; 127pp; English.

XX
 CC AAT04915-T04922 are oligonucleotide primers and probes used for the amplification and sequencing of mammalian stem cell factor (SCF). Non-naturally occurring SCF and C-terminally truncated polypeptides, having amino acid sequences sufficiently duplicative of naturally occurring SCF, stimulate growth of primitive progenitors such as haematopoietic progenitor cells, neural stem cells and primordial germ stem cells. The peptides can be used in a composition for treating leucopenia, anaemia or thrombocytopenia, for enhancing engraftment of bone marrow during transplantation or for bone marrow recovery after chemotherapy or radiation-induced bone marrow aplasia or myelosuppression. They can also be used for treating neoplasia, nerve damage, infertility, intestinal damage or myeloproliferative disorders. Antibodies may be raised against the peptides for use in detection or neutralisation of SCF in serum. SCF may be useful for the treatment of AIDS and severe combined immunodeficiency (SCID) states alone or in combination with other factors such as IL-7. (Updated on 25-MAR-2003 to correct PF field.)

XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAAAA 2726
 DB 20 CTAAAAA 1

RESULT 415

AAV07752/c
 ID AAV07752 standard; DNA; 20 BP.

XX AAV07752;

DT 07-DEC-1998 (first entry)

XX Phosphorothioate oligonucleotide.

XX phosphorothioate; sulphurisation; heterocycle; automated synthesis;
 KW antisense; EDITH; Beaucage reagent; ss.

XX Synthetic.

FT Key Location/Qualifiers
 FT misc_feature 1..20

FT /tag= a
 FT /note= "phosphorothioate internucleotide linkages"

XX WO9741130-A2.

XX 06-NOV-1997.

XX 29-APR-1997; 97WO-US007118.

XX 30-APR-1996; 96US-00641920.

XX (MINU) UNIV MINNESOTA.

XX (LOU) UNIV LOUISIANA STATE & AGRIC.

XX Barany G, Musier-Forsyth K, Xu Q, Chen L, Hammer RP;

XX WPI; 1997-549671/50.

XX Sulphurisation of phosphorus-containing compounds, e.g. oligonucleotide(s) - by contacting the compound with a di-sulphide-containing five-membered heterocycle.

PS Example 7; Page 30; 51pp; English.

XX The present invention provides a method for sulphurising phosphorus-containing compounds. It comprises contacting the phosphorus-containing compound with a 1,2,4-dithiazolidine-2,5-dione compound or a 3-substituted-1,2,4-dithiazolin-5-one compound. The method is especially useful for incorporation of phosphorothioate linkages into biologically important molecules such as DNA, RNA and phosphopeptides. Molecules containing such linkages are useful e.g. as antisense compounds for inhibiting gene expression, as reagents for studying DNA-protein or RNA-protein interactions, or as catalytic RNA. The present sequence represents an oligonucleotide with phosphorothioate linkages prepared by the method of the invention

XX Sequence 20 BP; 1 A; 0 C; 0 G; 0 T; 19 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA 2727
 DB 20 TAAAAA 1

RESULT 416

AAT63649/c

ID AAT63649 standard; DNA; 20 BP.

XX AAT63649;

DT 06-JUN-1997 (first entry)

DE Anti-HTLV antisense reference oligonucleotide HT.

XX antisense; complementary; tax gene; inhibit; HTLV-1;

KW human T-cell lymphotropic virus type 1; viral antigen expression; ss.

XX Synthetic.

XX JP09052898-A.

XX 25-FEB-1997.

XX 09-AUG-1995; 95JP-00224606.

XX 09-AUG-1995; 95JP-00224606.

XX (SOYA-) SOYAKU GIJUTSU KENKYUSHO KK.

XX WPI; 1997-197252/18.

XX Anti-HTLV-1 anti-sense oligo:nucleotide - is complementary to region of tax gene from human T-cell lymphotropic virus type 1 and inhibits viral antigen expression.

XX Example 1; Page 8; 10pp; Japanese.

XX Oligonucleotides having a partial sequence consisting of at least 15 bases of AAT63641 (an antisense oligo complementary to a region of the tax gene which can inhibit human T-cell lymphotropic virus type 1 (HTLV-1) viral antigen expression) are claimed. In an example, six antisense oligos were designed, T1-T6 (AAT63650-55) and were compared to six oligos derived from other regions of HTLV-1, i.e. S1 (splice junction), P1 (p21), R1 (rex), RRI (rex response element), E1 (env) and G1 (gag), four reference oligonucleotides TIS (tax-sense), HC (dc20), HT (dt20) CC (AAT63647-49) and a random 20mer (RAN) in a HTLV-1 virus antigen expression inhibiting test. Oligonucleotide T1 gave the best results

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 417
AAV34591
ID AAV34591 standard; DNA; 20 BP.
XX
AC AAV34591;
XX
XX 25-AUG-1998 (first entry)
XX
DE M. vaccae antigenic sequence hybridising oligo AD12.
XX
XX Mycobacterium vaccae; antigen; therapy; prevention; cytokine production;
KW M. avium; M. tuberculosis; immune response enhancer; cell proliferation;
KW mycobacteria infection; vaccine; cancer; ss.
XX
OS Synthetic.
OS Mycobacterium vaccae.
XX
XX WO9808542-A2.
XX
XX 05-MAR-1998.
XX
XX 28-AUG-1997; 97WO-NZ000105.
XX
XX 29-AUG-1996; 96US-00705347.
XX
XX 12-JUN-1997; 97US-00873970.
XX
XX (GENE-) GENESIS RES & DEV CORP.
XX
XX Tan P, Hiyama J, Visser E, Skinner MA, Scott LM, Prestidge RL;
XX WPI; 1998-216926/19.
XX
XX Mycobacterium vaccae polypeptides - used to develop products for use in
PT detection, therapy and prevention of mycobacteria infections or as immune
PT response enhancers.
XX
XX Example 8; Page 99; 153pp; English.
XX
XX This oligonucleotide is used in the DNA cloning strategies of the
CC Mycobacterium vaccae antigens. The invention provides M. vaccae
CC polypeptides that comprise an immunogenic portion of a soluble M. vaccae
CC antigen, or a variant, where the antigen induces an immune response in
CC patients previously exposed to a mycobacterium. Such M. vaccae
CC polypeptides can be used in methods for enhancing non-specific immune
CC response. The methods and products can be used for the detection,
CC treatment and prevention of infectious diseases caused by mycobacteria
CC such as M. vaccae, M. avium or M. tuberculosis. The products also have
CC the ability to induce cell proliferation and cytokine production (e.g.
CC interferon-gamma and interleukin-12 production) in T cells, NK cells, B
CC cells, or macrophages. They can be used for enhancing immune responses
CC for use in vaccines or immunotherapy of infectious diseases and cancers
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 418
AAT86606/c
ID AAT86606 standard; DNA; 20 BP.
XX

```

```

AC AAT86606;
XX
XX 04-JUN-1998 (first entry)
XX
XX Oligonucleotide separated by capillary affinity gel electrophoresis.
XX
KW Capillary affinity gel electrophoresis; separation; polymer-gel;
KW polyacrylamide; ss.
XX
XX Synthetic.
XX
XX WO9745721-A1.
XX
XX 04-DEC-1997.
XX
XX 23-MAY-1997; 97WO-EP002647.
XX
XX 24-MAY-1996; 96CH-00001320.
XX
XX (NOVS ) NOVARTIS AG.
XX
XX Muscate A, Paulus A, Natt F;
XX WPI; 1998-041763/04.
XX
XX Separation of electrically charged target molecules - by capillary
PT affinity gel electrophoresis using polymer-gel to which receptors for
PT target molecules are bound.
XX
XX Example D3; Page 25; 41pp; English.
XX
XX A mixture of oligonucleotides (AAT86604-7) were separated by a new
CC process using capillary affinity gel electrophoresis. The invention
CC relates to selective separation of electrically charged target molecules
CC in an analytical mixture. It comprises capillary affinity gel
CC electrophoresis using a capillary tube which is at least partly filled
CC with a polymer gel. Receptors for target molecules are covalently bound
CC to the polymer. An electric field of at least 50 volts/cm is applied. The
CC capillary tube is charged with the analytical mixture. In a first
CC separation stage, the target molecules in the mixture are bound to the
CC receptors and the remaining components are eluted, optionally whilst
CC splitting open. In a second stage, the elution conditions are changed,
CC optionally in stages, so that the affinity of the target molecules for
CC the receptor is eliminated and the target molecules are eluted and
CC detected, optionally whilst splitting open. The process is useful for
CC selective separation and/or determination of charged organic compounds,
CC such as oligonucleotides, peptides or carbohydrates. It may be used, e.g.
CC for isolation of specific proteins and DNA molecules, purification of
CC antibodies, analysis of antisense compounds or screening for enzyme
CC inhibitors. The process achieves higher resolution and selectivity than
CC prior art processes, especially in the case of complex biological
CC analytical mixtures. It has high sensitivity, even with small amounts of
CC samples. The derivatised polymers may be synthesised specifically using
CC standard methods
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 419
AAX27533/c
ID AAX27533 standard; RNA; 20 BP.
XX
XX AAX27533;
AC
XX
XX 27-MAY-1999 (first entry)
DT

```

XX Synthetic RNA sequence produced by the method of the invention.
 DE
 XX
 KW Silyloxymethyl; phosphonate; silyloxymethyl halide; diagnosis; ss;
 KW cyanoethyl phosphoramidate coupling; isomerisation; steric hindrance.
 XX
 OS Synthetic.
 XX
 PN WO9909044-A1.
 XX
 PD 25-FEB-1999.
 XX
 XX 17-AUG-1998; 98WO-BP005215.
 XX
 XX 18-AUG-1997; 97CH-00001931.
 XX
 PA (PITS/) PITTSCH S.
 PA (WEIS/) WEISS P A.
 PA (JENN/) JENNY L.
 XX
 XX Pitsch S, Weiss PA, Jenny L;
 PI
 XX WPI; 1999-180963/15.
 XX
 XX 2-Silyloxymethyl ribonucleosides and their phosphonate derivatives - have
 PT high purity, use in machine synthesis of ribonucleic acids, enable longer
 PT oligonucleotide chain construction, and larger amounts.
 XX
 XX Example 6; Page 25; 38pp; English.
 PS
 XX The invention relates to silyloxymethyl protected D- or L-ribonucleosides
 CC and their phosphonates (I), and silyloxymethyl halides (II). (I) are
 CC intermediates for synthesis of RNA-oligonucleotides with predetermined
 CC nucleotide sequence, particularly by machine synthesis. The groups
 CC specified above, apart from those on silyl, are those particularly for
 CC the cyanoethyl phosphoramidate coupling. Uses of the oligoribonucleotide
 CC products in diagnosis, therapy, and as research tools, are well known,
 CC and are not dealt with in detail. (II) is an intermediate for (I). The
 CC silyloxymethyl halide reagent is easy to prepare, and yields are high.
 CC Introduction of the silyloxymethyl group into the ribonucleoside is
 CC simple and rapid, and the acetal bond formed does not migrate.
 CC eliminating particularly the prior art problem of 2' to 3' isomerisation.
 CC The methylenedioxy group spacer between the silyl group and nucleoside
 CC ring results in less steric hindrance than bulky direct silyloxy
 CC linkages, enabling first, a range of choices for the silyl substituents,
 CC to provide, e.g., acid or base stability; and second, higher yields in
 CC coupling. Purer products are therefore obtained than in prior art,
 CC enabling larger quantities and longer chains of oligoribonucleotides to
 CC be synthesised successfully, and in shorter times
 XX
 XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 20 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 420
 AAZ11326
 ID AAZ11326 standard; DNA; 20 BP.
 XX
 AC AAZ11326;
 XX
 XX 25-OCT-1999 (first entry)
 DT
 XX Mycobacterial 16S rRNA specific oligo AD12.
 DE
 DE Mycobacterium vaccae protein; antigen; T cell activation; cytokine;
 KW dendritic cell maturation; infectious disease; immune disorder; cancer;
 KW

KW respiratory system; mycobacterial infection; allergy; tuberculosis;
 KW leprosy; sarcoidosis; lung cancer; asthma; skin disorder; psoriasis;
 KW dermatitis; eczema; alopecia areata; skin cancer; basal carcinoma;
 KW squamous cell carcinoma; melanoma; PCR primer; ss.
 XX
 OS Synthetic.
 OS Mycobacterium vaccae.
 XX
 PN WO9932634-A2.
 XX
 PD 01-JUL-1999.
 XX
 XX 23-DEC-1998; 98WO-NZ000189.
 XX
 XX 23-DEC-1997; 97US-00996624.
 PR 23-DEC-1997; 97US-00997080.
 PR 23-DEC-1997; 97US-00997362.
 PR 11-JUN-1998; 98US-00095855.
 PR 17-SEP-1998; 98US-00156181.
 PR 04-DEC-1998; 98US-00205426.
 XX
 XX (GENE-) GENESIS RES & DEV CORP LTD.
 PA
 XX Tan P, Watson J, Visser ES, Skinner MA, Prestidge RL;
 PI
 XX WPI; 1999-430163/36.
 XX
 DR Enhancing immune response to an antigen.
 XX
 PT
 XX Example 15; Page 177; 243pp; English.
 PS
 XX The invention provides heat-killed Mycobacterium vaccae, or recombinant
 CC M. vaccae proteins. The M. vaccae proteins may be employed to activate T
 CC cells and natural killer cells, to stimulate the production of cytokines,
 CC to enhance the expression of co-stimulatory molecules on dendritic cells
 CC and monocytes, and to enhance dendritic cell maturation and function. The
 CC proteins can be expressed by standard recombinant methodology.
 CC Pharmaceutical compositions comprising the proteins or nucleic acid
 CC sequences encoding the proteins can be used for the treatment
 CC prevention, and detection of disorders including infectious diseases,
 CC immune disorders and cancer. In particular, the compounds and methods are
 CC used for treatment of diseases of the respiratory system, such as
 CC mycobacterial infections, asthma, allergies, tuberculosis, leprosy,
 CC sarcoidosis and lung cancers, and disorders of the skin such as
 CC psoriasis, atopic dermatitis, eczema, allergic contact dermatitis,
 CC alopecia areata, and skin cancers such as basal carcinoma, squamous cell
 CC carcinoma and melanoma
 XX
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 421
 AAA40449
 ID AAA40449 standard; DNA; 20 BP.
 XX
 AC AAA40449;
 XX
 XX 13-NOV-2000 (first entry)
 DT
 XX Electrochemical detection method sample DNA target.
 DE
 XX Electrochemical detection; glucose; cholesterol; urea nitrogen;
 KW bilirubin; uric acid; haemoglobin; lactic acid; body fluid; blood;
 KW plasma; serum; urine; lymph diagnosis; ss.
 XX

PT Saturated and unsaturated derivatives of abietic acid and their
PT conjugated derivatives with natural and synthetic polymers, having use in
PT diagnostics, chemical reactions and analysis.
XX Example 5; Page 20; 39pp; French.
PS
XX The invention relates to novel saturated and unsaturated abietane
CC derivatives. The new compounds may be used directly or indirectly in the
CC development of new diagnostic tests, to follow infections, especially
CC viral infections, to follow and/or measure chemical products, especially
CC potential pollutants. In diagnostic tests they may be used as markers, or
CC to form a universal solid phase after immobilization on a solid support,
CC to produce monoclonal antibodies or polyclonal antibodies having
CC diagnostic uses. The oligonucleotides AAZ91113-291117 represent examples
CC of sequences that can be labeled with the new abietane derivatives. The
CC new derivatives may be used to substitute for biotin in diagnostic tests,
CC but because they are not found naturally in humans the risk of potential
CC interactions with biological molecules is eliminated
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 425
AAZ91117/c
ID AAZ91117 standard; DNA; 20 BP.
XX
XX AAZ91117;
XX 07-NOV-2000 (first entry)
XX 2'-Methoxyethoxy-modified oligonucleotide.
XX Phosphodiester oligonucleotide; H-phosphonate chemistry; ss.
XX Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..19
FT /*tag= a
FT /note= "2'-methoxyethoxy modified thymidine"
XX WO200047593-A1.
XX 17-AUG-2000.
XX 11-FEB-2000; 2000WO-US003543.
XX 12-FEB-1999; 99US-00250075.
XX (ISIS-) ISIS PHARM INC.
XX Manoharan M, Maier MA;
XX WPI; 2000-558188/51.
XX Preparation of mixed backbone oligomeric compounds useful as e.g. primers
PT for diagnostic tests, involves oxidation of H-phosphonate internucleoside
PT linkages to phosphodiester internucleoside linkages.
XX Example 12; Page 34; 49pp; English.
XX The present sequence is that of a phosphodiester oligonucleotide
CC containing 20 T nucleobases, 19 having a 2'-methoxyethoxy group on its 5'
CC ribosyl sugar moiety. It is an example of an oligomeric compound produced
CC according to the methods of the invention. The invention provides

XX (AMGE-) AMGEN INC.
XX Zsebo KM, Suggs SV, Bosselmann RA, Martin FH;
XX WPI; 2000-259135/23.
XX Production of hematopoietic cells suitable for administration to a
PT subject using progenitor cells and expanding the cells using stem cell
PT factor.
XX Example 3; Fig 12C; 123pp; English.
PS
XX A method has been developed of making haematopoietic cells suitable for
CC administration to a subject. The method comprises: (a) obtaining
CC haematopoietic progenitor cells from a donor; and (b) expanding the cells
CC by adding to the cells a haematopoietically effective dose of a
CC polypeptide product having at least part of the primary structural
CC confirmation and one or more of the biological properties of naturally
CC occurring stem cell factor (SCF). The method is useful for stimulating
CC primitive progenitor cells including early haematopoietic progenitor
CC cells which are capable of maturing to erythroid, megakaryocyte,
CC granulocyte, lymphocyte and macrophage cells. SCF results in absolute
CC increases in haematopoietic cells of both myeloid and lymphoid lineages.
CC SCF is useful for treating haematopoietic disorders. The method is useful
CC for expanding early haematopoietic progenitors in syngeneic, allogeneic
CC or autologous bone marrow transplant. SCF is useful for enhancing the
CC efficiency of gene therapy based on transfecting haematopoietic stem
CC cells. SCF is also useful for combating the myelosuppressive effects of
CC anti-HIV drugs such as AZT and for enhancing haematopoietic recovery
CC after acute blood loss and as a boost to the immune system for fighting
CC neoplasia (cancer). The present sequence represents a universal
CC oligonucleotide which is used in an example from the present invention
XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
Db 20 CTAATAAAAAAAAAAAAAAAAAA 1
RESULT 424
AAZ91117/c
ID AAZ91117 standard; DNA; 20 BP.
XX
XX AAZ91117;
XX 06-JUN-2000 (first entry)
XX Oligonucleotide #5 for conjugation to abietane derivative.
XX Abietane derivative; labelling; diagnostic test; biotin substitute; ss.
XX Synthetic.
XX FR2781802-A1.
XX 04-FEB-2000.
XX 31-JUL-1998; 98FR-00010084.
XX 31-JUL-1998; 98FR-00010084.
XX (INMR) BIO MERIEUX.
XX Charles MH, Piga N, Battail PN, Veron L, Delair T, Mandrand B;
XX WPI; 2000-239603/21.
XX

CC compounds and methods for the preparation of mixed backbone oligomeric,
 CC or chimeric, compounds having phosphodiester internucleoside linkages in
 CC addition to phosphorothioate and/or phosphoramidate internucleoside
 CC linkages. The methods also include incorporation of boranophosphate
 CC internucleoside linkages. The methods utilize H-phosphonate intermediates
 CC that are coupled together forming contiguous regions of 1 or more H-
 CC phosphate internucleoside linkages. Each contiguous region is
 CC subsequently oxidized to phosphodiester, phosphorothioate,
 CC phosphoramidate or boranophosphate internucleoside linkages prior to
 CC further elongation. Mixed backbone oligomeric compounds are prepared in
 CC this manner by oxidizing adjacent regions with different reagents.
 CC Oligomeric compounds of the invention are prepared using novel oxidation
 CC steps that oxidize a region of 1 or more H-phosphonate internucleoside
 CC linkages without degrading existing linkages that have been previously
 CC oxidized. The oligonucleotides obtained are useful as primers in PCR,
 CC probes, linkers, gene fragments and for other diagnostic tests on e.g.
 CC biological tissue, fluid, cells etc., as research reagents, and as
 CC antiviral agents

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 426
 AAC87238/c

ID AAC87238 standard; DNA; 20 BP.

AC AAC87238;

DT 09-MAR-2001 (first entry)

DE Phosphorothioate poly T oligonucleotide, SEQ ID NO:17.

XX Immunostimulatory oligodeoxynucleotide; immunostimulatory ODN;
 KW immunostimulatory DNA-binding protein; nucleolin; hnRNP D; AUF1;
 KW hnRNP A1; lupus La protein; functional modifier identification; agonist;
 KW antagonist; mimic; inhibitor; drug screening;
 KW cellular target identification; oligonucleotide optimisation;
 KW immunotherapy; ss.

XX Synthetic. ;

XX WO200067023-A1.

XX 09-NOV-2000.

XX 28-APR-2000; 2000WO-US011697.

XX 29-APR-1999; 99US-0131830P.

XX 03-MAR-2000; 2000US-0186845P.

XX (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.

XX (IOWA) UNIV IOWA RES FOUND.

XX Noll BO, Schetter C, Krieg AM;

XX WPI; 2001-016002/02.

XX Immunostimulatory DNA binding proteins to identify immunostimulatory DNA
 PT functional modifiers, immunostimulatory DNA binding competitors and to
 PT optimize immunostimulatory oligodeoxynucleotides for stimulation.

XX Example 1; Page 45; 95pp; English.

XX The invention relates to the use of an immunostimulatory single-stranded
 CC DNA-binding protein in screening assays to identify compounds which bind

CC to it and thereby act as functional modifiers of immunostimulatory
 CC oligodeoxynucleotide (ODN) activity. Such modifiers of ODN activity
 CC consist of immunostimulatory DNA binding inhibitors, immunostimulatory
 CC DNA mimics, and immunostimulatory DNA agonists and antagonists.
 CC Immunostimulatory DNA-binding proteins can also be used in screening
 CC methods to identify immunostimulatory DNA binding competitors, and to
 CC optimize an immunostimulatory ODN for immune stimulation. Isolated
 CC complexes of an immunostimulatory DNA-binding protein bound to an
 CC immunostimulatory ODN can additionally be used to screen a panel of
 CC candidate target molecules to identify the cellular target molecules of
 CC the immunostimulatory ODN. The immunostimulatory DNA-binding proteins
 CC used in the methods of the invention are the RNA-binding proteins
 CC nucleolin, hnRNP D, AUF1, hnRNP A1 and lupus La protein. The screening
 CC methods are useful for identifying a compound that inhibits interaction
 CC between immunostimulatory DNA and an immunostimulatory DNA-binding
 CC protein and for identifying agonists useful in immunotherapy. The complex
 CC is useful in screening for immunostimulatory DNA cellular target
 CC molecules. The candidate immunostimulatory ODN competitors allow the
 CC investigation of structure/activity relationships of immunostimulatory
 CC DNA-binding proteins and immunostimulatory ODNs. The present sequence
 CC represents an oligonucleotide used in an exemplification of the invention

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 427

AAC87230/c

ID AAC87230 standard; DNA; 20 BP.

AC AAC87230;

DT 09-MAR-2001 (first entry)

DE Digoxigenin-labelled poly T oligonucleotide, SEQ ID NO:9.

XX Immunostimulatory oligodeoxynucleotide; immunostimulatory ODN;
 KW immunostimulatory DNA-binding protein; nucleolin; hnRNP D; AUF1;
 KW hnRNP A1; lupus La protein; functional modifier identification; agonist;
 KW antagonist; mimic; inhibitor; drug screening;
 KW cellular target identification; oligonucleotide optimisation;
 KW immunotherapy; ss.

XX Synthetic.

XX WO200067023-A1.

XX 09-NOV-2000.

XX 28-APR-2000; 2000WO-US011697.

XX 29-APR-1999; 99US-0131830P.

XX 03-MAR-2000; 2000US-0186845P.

XX (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.

XX (IOWA) UNIV IOWA RES FOUND.

XX Noll BO, Schetter C, Krieg AM;

XX WPI; 2001-016002/02.

XX Immunostimulatory DNA binding proteins to identify immunostimulatory DNA
 PT functional modifiers, immunostimulatory DNA binding competitors and to
 PT optimize immunostimulatory oligodeoxynucleotides for stimulation.

XX Example 1; Page 45; 95pp; English.

optimize immunostimulatory oligodeoxynucleotides for stimulation.

Example 1; Page 45; 95pp; English.

The invention relates to the use of an immunostimulatory single-stranded DNA-binding protein in screening assays to identify compounds which bind to it and thereby act as functional modifiers of immunostimulatory oligodeoxynucleotide (ODN) activity. Such modifiers of ODN activity consist of immunostimulatory DNA binding inhibitors, immunostimulatory DNA mimics, and immunostimulatory DNA agonists and antagonists. Immunostimulatory DNA-binding proteins can also be used in screening methods to identify immunostimulatory DNA binding competitors, and to optimize an immunostimulatory ODN for immune stimulation. Isolated complexes of an immunostimulatory DNA-binding protein bound to an immunostimulatory ODN can additionally be used to screen a panel of candidate target molecules to identify the cellular target molecules of the immunostimulatory ODN. The immunostimulatory DNA-binding proteins used in the methods of the invention are the RNA-binding proteins nucleolin, hnRNP D, AUF1, hnRNP A1 and lupus La protein. The screening methods are useful for identifying a compound that inhibits interaction between immunostimulatory DNA and an immunostimulatory DNA-binding protein and for identifying agonists useful in immunotherapy. The complex is useful in screening for immunostimulatory ODN competitors allow the molecules. The candidate immunostimulatory ODN competitors allow the investigation of structure/activity relationships of immunostimulatory DNA-binding proteins and immunostimulatory ODNs. The present sequence represents an oligonucleotide used in an exemplification of the invention

Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 429
AAS10402/C
ID AAS10402 standard; DNA; 20 BP.
AC AAS10402;
XX
XX
XX 24-OCT-2001 (first entry)
XX
XX DNA template for 3' end labeling of an RNA molecule, #14.
DE 3' RNA end labeling; DNA template; Okazaki fragment; 5' overhang; ss.
KW
XX Synthetic.
OS
XX US6238865-B1.
XX
XX 29-MAY-2001.
XX
XX 16-OCT-1998; 98US-00173936.
XX
XX 17-OCT-1997; 97US-0063757P.
XX
XX (CHEN/) CHEN G.
PA (HUAN/) HUANG Z.
PA (SZOS/) SZOSTAK J W.
XX
XX Huang Z, Szostak JW;
XX WPI; 2001-366470/38.
XX
XX Modifying a 3' terminus of a pre-selected DNA sequence, useful for
PT labeling and modifying 3'-termini of other nucleic acids, comprises using
PT a synthetic nucleotide template with a defined overhang nucleotide.
XX

The invention relates to the use of an immunostimulatory single-stranded DNA-binding protein in screening assays to identify compounds which bind to it and thereby act as functional modifiers of immunostimulatory oligodeoxynucleotide (ODN) activity. Such modifiers of ODN activity consist of immunostimulatory DNA binding inhibitors, immunostimulatory DNA mimics, and immunostimulatory DNA agonists and antagonists. Immunostimulatory DNA-binding proteins can also be used in screening methods to identify immunostimulatory DNA binding competitors, and to optimize an immunostimulatory ODN for immune stimulation. Isolated complexes of an immunostimulatory DNA-binding protein bound to an immunostimulatory ODN can additionally be used to screen a panel of candidate target molecules to identify the cellular target molecules of the immunostimulatory ODN. The immunostimulatory DNA-binding proteins used in the methods of the invention are the RNA-binding proteins nucleolin, hnRNP D, AUF1, hnRNP A1 and lupus La protein. The screening methods are useful for identifying a compound that inhibits interaction between immunostimulatory DNA and an immunostimulatory DNA-binding protein and for identifying agonists useful in immunotherapy. The complex is useful in screening for immunostimulatory ODN competitors allow the molecules. The candidate immunostimulatory ODN competitors allow the investigation of structure/activity relationships of immunostimulatory DNA-binding proteins and immunostimulatory ODNs. The present sequence represents an oligonucleotide used in an exemplification of the invention

Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 428
AAC87241/C
ID AAC87241 standard; DNA; 20 BP.
AC AAC87241;
XX
XX
XX 09-MAR-2001 (first entry)
XX
XX Poly T oligonucleotide, SEQ ID NO:20.
XX
XX Immunostimulatory oligodeoxynucleotide; immunostimulatory ODN;
KW immunostimulatory DNA-binding protein; nucleolin; hnRNP D; AUF1;
KW hnRNP A1; lupus La protein; functional modifier identification; agonist;
KW antagonist; mimic; inhibitor; drug screening;
KW cellular target identification; oligonucleotide optimisation;
KW immunotherapy; ss.
XX
XX Synthetic.
XX
XX WO200067023-A1.
XX
XX 09-NOV-2000.
XX
XX 28-APR-2000; 2000WO-US011697.
XX
XX 29-APR-1999; 99US-0131830P.
PR 03-MAR-2000; 2000US-0186845P.
XX
XX (CPGI-) CPG IMMUNOPHARMACEUTICALS GMBH.
PA (IOWA) UNIV IOWA RES FOUND.
PA
XX Noll BO, Schetter C, Krieg AM;
XX WPI; 2001-016002/02.
XX
XX Immunostimulatory DNA binding proteins to identify immunostimulatory DNA
PT functional modifiers, immunostimulatory DNA binding competitors and to
PT

PS Example 5; Col 13; 22pp; English.

CC The sequence represents a synthetic DNA template molecule used to

CC demonstrate the method of the invention. The invention relates to a

CC method of modifying (e.g. 3' end labelling with 32p dATP) the 3' terminus

CC of an RNA molecule by providing a DNA oligonucleotide, complementary to

CC the 3' end of the RNA molecule, with an overhang at the 5' end which

CC allows incorporation of the labeling nucleotide into the RNA molecule.

CC The method, based on the synthesis of Okazaki fragments, is useful for

CC labeling and modifying the 3'-termini of other nucleic acids such as DNA

CC fragments. The method is a simple and efficient way of labeling or

CC modifying RNA 3'-termini using DNA polymerase and a synthetic template

CC with defined overhang nucleotides

XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

|||||

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 430

AAAD16997/C

ID AAD16997 standard; DNA; 20 BP.

AC AAD16997;

XX

DT 29-NOV-2001 (first entry)

XX

DE Capture probe CP5'.

XX

KW Scaffold protein; antibody mimic; fibronectin type III domain;

KW randomised loop; randomised beta-sheet; diagnostic purpose;

KW protein designing; probe; tenth module of human Fn3; 10Fn3;

KW fibronectin module of type III; Fn3; ss.

XX

OS Unidentified.

XX

PN W0200164942-A1.

XX

PD 07-SEP-2001.

XX

PF 28-FEB-2001; 2001WO-US006414.

XX

PR 29-FEB-2000; 2000US-00515260.

XX

PA (PHYL-) PHYLLOS INC.

XX

PI Lipovsek D, Wagner RW, Kuimelis RG;

XX

DR WPI; 2001-557782/62.

XX

PT Fibronectin scaffold protein array for obtaining a protein/compound which

PT binds to a compound/protein, comprises a fibronectin type III domain

PT having a randomized loop, a randomized beta-sheet or their combination.

XX

PS Disclosure; Page 41; 67pp; English.

XX

CC The present invention relates to an array of proteins (antibody mimics)

CC comprising a fibronectin type III domain having a randomised loop, a

CC randomised beta-sheet, or their combination, and has the capacity to bind

CC to a compound that is not bound by a corresponding naturally- occurring

CC fibronectin, immobilised onto a solid support. The antibody mimics is

CC useful for detecting a compound preferably a protein, in a biological

CC sample. It is also useful to detect one or more different analytes

CC simultaneously in a sample. Hence is useful for diagnostic purposes. It

CC is also useful for the purpose of designing proteins capable of binding

CC to virtually any compound of interest. The present sequence is a capture

CC probe used to self-assemble and anchor the tenth module of human

CC fibronectin module of type III (Fn3) (10Fn3) which is used in an

CC exemplification of the invention

XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

|||||

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 431

AAF60896

ID AAF60896 standard; DNA; 20 BP.

XX

AC AAF60896;

XX

DT 15-MAY-2001 (first entry)

XX

DE Conjugate forming oligonucleotide ON5 SEQ ID 5.

XX

KW Transport; membrane; cytostatic; virucide; vasotropic; dermatological;

KW antipsoriatic; antiasthmatic; gene therapy; tumor cell; antisense;

KW tumor therapy; drug; phosphodiester linkage; ss.

XX

OS Unidentified.

XX

PN DE19935302-A1.

XX

PD 08-FEB-2001.

XX

PF 28-JUL-1999; 99DE-01035302.

XX

PR 28-JUL-1999; 99DE-01035302.

XX

PA (AVET) AVENTIS PHARMA DEUT GMBH.

XX

PI Uhlmann E, Greiner B, Unger E, Gothe G, Schwerdel M;

XX

DR WPI; 2001-203679/21.

XX

PT New substituted aryl conjugates of parent molecules, especially

PT oligonucleotides, having improved transmembrane and intracellular

PT transport properties, useful as medicaments or diagnostic agents.

XX

PS Disclosure; Page 9; 28pp; German.

XX

CC This invention describes a novel conjugate (I) which consists of (A) a

CC molecule to be transported and (B) at least one aryl residue of formula -

CC Ar-(X-C(Y)-R₁)_n (II). Ar = group containing at least one aromatic ring;

CC X = O or N (sic); Y = O, S or NH-R₂ (sic); R₁ = optionally substituted

CC 1-23C alkyl (optionally containing double and/or triple bonds); R₂ =

CC optionally substituted 1-18C alkyl (optionally containing double and/or

CC triple bonds); n = integer of 1 or more. (A) is bonded to (B) directly or

CC via a chemical group, provided that the chemical group is other than CH₂

CC -S if the bond is via a phosphodiester linkage of (A). The invention also

CC describes (i) the preparation of a conjugate (I') of (A') a molecule to

CC be transported and (B') at least one aryl residue (not restricted to

CC (II)), by preparing (A') containing a reactive function at the position

CC at which (B') is to be bonded, preparing (B') and reacting (A') and (B');

CC and (ii) the use of aryl groups (II) (optionally bonded via a chemical

CC group) for transporting (A) across biological membranes. The products of

CC the invention have cytostatic, virucide, vasotropic, dermatological,

CC antipsoriatic and antiasthmatic activity and can be used for gene

CC therapy. Conjugation of (A) with (B) is useful for transporting (A)

CC across biological membranes or into eukaryotic or prokaryotic cells

CC (specifically bacterial, yeast or mammalian cells, including human cells,

CC particularly tumor cells). Medicaments, diagnostic agents and test kits

CC containing (I) are also claimed. Typically (I) are antisense

CC oligonucleotide derivatives for tumor therapy; oligonucleotide drugs for

CC treating viral infections or diseases associated with integrins or cell-
 CC cell interactions (e.g. restenosis, vitiligo, psoriasis or asthma); or
 CC labeled oligonucleotides for in vivo diagnostic use, e.g. by in situ
 CC hybridization. Conjugation with (B) markedly improves the cellular uptake
 CC of (A), e.g. in tumor cells. (B) include fluorescein derivative residues,
 CC in which case the conjugates (I) are fluorescently labeled, allowing
 CC microscopic monitoring of cellular uptake etc. The cellular uptake of (I)
 CC is superior to that obtained using other conjugated groups related to
 CC (II); e.g. oligonucleotides conjugated with fluorescein diacetate (within
 CC the scope of (B)) have superior uptake to corresponding fluorescein
 CC conjugates

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAA 20

RESULT 432

AAS63428
 ID AAS63428 standard; DNA; 20 BP.

XX AAS63428;

XX 29-JAN-2002 (first entry)

XX Oligonucleotide-nanoparticle probe #52.

XX Oligonucleotide-nanoparticle probe; diagnostic; forensic analysis;
 KW nucleic acid detection; nanostructure; biochip; biofilter; drug delivery;
 KW ss.

XX Synthetic.

XX WO200173123-A2.

XX 04-OCT-2001.

XX 28-MAR-2001; 2001WO-US010071.

XX 28-MAR-2000; 2000US-0192699P.

XX 26-APR-2000; 2000US-0200161P.

XX 26-JUN-2000; 2000US-00603830.

XX 26-JUN-2000; 2000US-0213906P.

XX 08-DEC-2000; 2000US-0254392P.

XX 11-DEC-2000; 2000US-0255235P.

XX 12-JAN-2001; 2001US-00760500.

XX 28-MAR-2001; 2001US-00820279.

XX (NANO-) NANOSPHERE INC.

XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 Taton TA, Park S, Li Z;

XX WPI; 2001-656926/75.

XX Detecting and separating nucleic acid, useful e.g. for diagnosis,
 PT comprises reaction with nanoparticles that carry oligonucleotides
 PT complementary to parts of the target.

XX Example 18; Page 158; 404pp; English.

XX The invention relates to a method for detection of nucleic acid (I)
 CC having at least 2 portions, comprising treatment with nanoparticles that
 CC carry oligonucleotides complementary to at least 2 parts of (I), where
 CC detectable change caused by hybridisation of the oligonucleotide to (I)
 CC is observed. The method is used to detect (or to separate) specific (I),
 CC e.g. for diagnosing a wide variety of diseases, sequencing, in forensic

CC analysis etc., and generally to detect analytes other than (I). The
 CC oligonucleotide-derivatised nanoparticles are also useful for preparing
 CC nanostructures useful, for example, as biochips, biofilters, mechanical
 CC devices, separation membranes, chemical sensors, in computers, and for
 CC drug delivery. Very stable nanoparticle-oligonucleotide conjugates can be
 CC produced, allowing their direct use (as probes) in polymerase chain
 CC reaction, i.e. they survive multiple heating/cooling cycles so do not
 CC need to be added after amplification. (I) are detected by simple colour
 CC change, without the need for special equipment making possible rapid
 CC field testing for e.g. pathogens. AAS63374-AAS63448 represent
 CC oligonucleotide-nanoparticle probes, and related sequences, used in the
 CC method of the invention

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAA 20

RESULT 433

AAD03632

ID AAD03632 standard; DNA; 20 BP.

XX AAD03632;

XX 19-JUN-2001 (first entry)

XX Human ku autoantigen amplifying KU_REV primer.

XX Human; natural antisense mRNA enrichment; antisense-based therapy;

KW RT-PCR primer; ku autoantigen; ss.

XX Homo sapiens.

XX WO200125488-A2.

XX 12-APR-2001.

XX 06-OCT-2000; 2000WO-US027557.

XX 06-OCT-1999; 99US-0157843P.

XX (QUAR-) QUARK BIOTECH INC.

XX Gilad S, Einat P, Grossman A;

XX WPI; 2001-266326/27.

XX Enrichment and detection of natural antisense mRNA comprises generating
 PT double stranded hybrid cDNA using a polymerase with an exonuclease
 PT activity, amplifying using a DT primer and cloning.

XX Example; Page 12; 37pp; English.

XX The invention relates to a method for enrichment of natural antisense
 CC messenger RNA. This method involves generating a population of cDNA from
 CC mRNA, incubating the generated cDNA to produce double stranded hybrid DNA
 CC molecules consisting of sense and antisense cDNA, treating the hybrid
 CC molecules using DNA polymerase with an exonuclease activity, amplifying
 CC the double stranded molecule using a deoxythymidine (dT) primer and
 CC cloning the amplified double stranded molecule. This method is useful for
 CC enrichment of natural antisense mRNA from any natural source of RNA. It
 CC is used to detect whether mRNAs have a natural anti-sense counterpart.
 CC The method provides a basis for finding new genes with important cellular
 CC regulatory roles or new regulatory information for known genes and
 CC provides a starting material for development of an antisense-based
 CC therapeutic to treat a disease in which down regulation or inhibition of
 CC the sense gene or transcript is involved. The present sequence is KU_REV

CC reverse transcription PCR (RT-PCR) primer used for amplifying human ku
 CC autoantigen sequence. This primer is used in endogenous antisense
 CC identification (EASI) procedure for enrichment of natural antisense mRNA
 XX
 SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2010 TCATGGCAACTCCAGAGCAG 2029
 |||||
 Db 1 TCATGGCAACTCCAGAGCAG 20

RESULT 434
 AAF28481
 ID AAF28481 standard; DNA; 20 BP.

XX
 AC AAF28481;

XX
 DT 03-APR-2001 (first entry)

XX
 DE Random oligonucleotide, SEQ ID NO: 53.

KW Nucleic acid detection; nanoparticle-oligonucleotide conjugate;
 KW disease diagnosis; forensic analysis; DNA sequencing; paternity testing;
 KW cell line authentication; gene therapy; ss.

XX
 OS Synthetic.

XX
 PN WO200100876-A1.

XX
 PD 04-JAN-2001.

XX
 PF 26-JUN-2000; 2000WO-US017507.

XX
 PR 25-JUN-1999; 99US-00344667.

XX
 PR 26-APR-2000; 2000US-0200161P.

XX
 PA (MIRK/) MIRKIN C A.

XX
 PA (LETS/) LETSINGER R L.

XX
 PA (MUCI/) MUCIC R C.

XX
 PA (STOR/) STORHOFF J J.

XX
 PA (ELGH/) ELGHANIAN R.

XX
 PA (TATO/) TATON T A.

XX
 PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 PI Taton TA;

XX
 WPI; 2001-061976/07.

XX
 PT Detecting nucleic acid, useful for e.g. diagnosis of diseases, forensics
 PT and DNA sequencing, comprises observing detectable change brought about
 PT by hybridization of nucleic acid with substrate or particle bound
 PT oligonucleotides.

XX
 PS Disclosure; Page 199; 205pp; English.

XX
 CC The present sequence is an oligonucleotide used in a method for detecting
 CC a nucleic acid having at least 2 portions. The method comprises
 CC hybridising the nucleic acid with oligonucleotides, such as the present
 CC sequence, attached to a substrate and/or particle and detecting a change
 CC in colour, conductivity or optical density. The method is useful for the
 CC diagnosis and/or monitoring of diseases, in forensics, in DNA sequencing,
 CC for paternity testing, for cell line authentication and for monitoring
 CC gene therapy. Detecting nucleic acids based upon observing a colour
 CC change is cheap, fast, simple, and does not require specialised or
 CC expensive equipment. The nanoparticle oligonucleotide conjugates remain
 CC stable for at least 6 months. A single base mismatch and as little as 20
 CC femtomoles (fM) of target can be detected using the conjugates

XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 435

AAS10371
 ID AAS10371 standard; DNA; 20 BP.

XX
 AC AAS10371;

XX
 DT 24-OCT-2001 (first entry)

XX
 DE Oligonucleotide-cyclic disulphide linker, d.

KW Nanoparticle; cyclic disulphide-oligonucleotide; DNA detection;
 KW DNA isolation; genetic disease; bacterial disease; viral disease;
 KW forensic science; paternity testing; gene therapy; ss.

XX
 OS Synthetic.

XX
 FH Key Location/Qualifiers

XX
 FT misc_feature 1

XX
 FT /*tag= a
 FT /note= "A is covalently linked to a cyclic-disulphide
 FT moiety"

XX
 PN WO200151665-A2.

XX
 PD 19-JUL-2001.

XX
 PF 12-JAN-2001; 2001WO-US001190.

XX
 PR 13-JAN-2000; 2000US-0176409P.

XX
 PR 26-APR-2000; 2000US-0200161P.

XX
 PR 26-JUN-2000; 2000US-00603830.

XX
 PR 12-JAN-2001; 2001US-00760500.

XX
 PA (NANO-) NANOSPHERE INC.

XX
 PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 PI Taton TA, Li Z;

XX
 PI WPI; 2001-451868/48.

XX
 DR

XX
 PT Detecting a nucleic acid useful in e.g. diagnosing genetic, bacterial or
 PT viral diseases, by contacting the nucleic acid with oligonucleotides
 PT attached to nanoparticles and having sequences complementary a portion of
 PT the nucleic acid.

XX
 PS Example 24; Fig 44; 323pp; English.

XX
 CC The sequence represents a cyclic disulphide linked oligonucleotide which
 CC may be coupled with colloidal gold particles (nanoparticles) and used to
 CC demonstrate the method of the invention. The invention relates to
 CC isolating or detecting a nucleic acid of interest, in a mixture of
 CC nucleic acids, by binding it to 2 or more complementary nucleotides which
 CC have a nanoparticle attached to their 5' ends. The nanoparticles (e.g.
 CC colloidal gold) are used to both isolate and detect (e.g. by linking the
 CC particle to a fluorescent probe) the resultant complex. The methods are
 CC useful for detecting nucleic acids, natural or synthetic, and modified or
 CC unmodified. The methods may also be applied in the diagnosis of genetic,
 CC bacterial and viral diseases, in forensics, in DNA sequencing, for
 CC paternity testing, for cell line authentication, and for monitoring gene
 CC therapy. The methods are further useful in research and analytical
 CC laboratories in DNA sequencing, in the field to detect the presence of
 CC specific pathogens, for quick identification of an infection to assist in
 CC drug prescription, and in homes and health centres for inexpensive first-

CC line screening. The methods, which are based on observing colour change
 CC with the naked eye, are cheap, fast, simple, robust (reagents are
 CC stable), do not require specialised or expensive equipment, and little or
 CC no instrumentation is required

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 ||||||||||||||||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 436

AAF99427/C

ID AAF99427 standard; DNA; 20 BP.

XX

AC AAF99427;

XX 12-JUN-2001 (first entry)

XX Immunostimulatory nucleic acid #543.

XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.

XX Synthetic.

OS

XX WO200122972-A2.

PN 05-APR-2001.

XX 25-SEP-2000; 2000WO-US026383.

XX 25-SEP-1999; 99US-0156113P.

PR 27-SEP-1999; 99US-0156135P.

PR 23-AUG-2000; 2000US-0227436P.

XX (IOWA) UNIV IOWA RES FOUND.

PA (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Schetter C, Vollmer J;

PI WPI; 2001-273485/28.

XX Vaccinating against tumors, infectious diseases, allergies and asthma

PT using immunostimulatory Py-rich and TG nucleic acids.

XX Claim 101; Page 49; 338pp; English.

XX The present invention relates to a method for stimulating an immune

CC response. The method comprises administering an immunostimulatory nucleic

CC acid to a non-todent subject in sufficient quantity to stimulate an

CC immune response. The present sequence is one such immunostimulatory

CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich

CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects

CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae

CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,

CC haemophilus, campylobacter, clostridium, Escherichia coli and/or

CC staphylococcus), fungal antigens and/or parasitic antigens. The method is

CC also useful for preventing cancer, asthma, infectious disease, allergy or

CC immune deficiency. The present sequence can also be used to redirect a

CC Th2 to a Th1 immune response and to activate immune cells. Note: the

CC present sequence may have a phosphorothioate backbone

XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

|||||

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 ||||||||||||||||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 437

AAF99099/C

ID AAF99099 standard; DNA; 20 BP.

XX

AC AAF99099;

XX 12-JUN-2001 (first entry)

XX Immunostimulatory nucleic acid #215.

XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.

XX Synthetic.

OS

XX WO200122972-A2.

PN 05-APR-2001.

XX 25-SEP-2000; 2000WO-US026383.

XX 25-SEP-1999; 99US-0156113P.

PR 27-SEP-1999; 99US-0156135P.

PR 23-AUG-2000; 2000US-0227436P.

XX (IOWA) UNIV IOWA RES FOUND.

PA (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Schetter C, Vollmer J;

PI WPI; 2001-273485/28.

XX Vaccinating against tumors, infectious diseases, allergies and asthma

PT using immunostimulatory Py-rich and TG nucleic acids.

XX Claim 101; Page 42; 338pp; English.

XX The present invention relates to a method for stimulating an immune

CC response. The method comprises administering an immunostimulatory nucleic

CC acid to a non-rodent subject in sufficient quantity to stimulate an

CC immune response. The present sequence is one such immunostimulatory

CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich

CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects

CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae

CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,

CC haemophilus, campylobacter, clostridium, Escherichia coli and/or

CC staphylococcus), fungal antigens and/or parasitic antigens. The method is

CC also useful for preventing cancer, asthma, infectious disease, allergy or

CC immune deficiency. The present sequence can also be used to redirect a

CC Th2 to a Th1 immune response and to activate immune cells. Note: the

CC present sequence may have a phosphorothioate backbone

XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

|||||

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1


```

RESULT 438
AAF99431
ID AAF99431 standard; DNA; 20 BP.
XX
AC AAF99431;
XX
DT 12-JUN-2001 (first entry)
XX
DE Immunostimulatory nucleic acid #547.
XX
XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
OS Synthetic.
XX
PN WO200122972-A2.
XX
XX
XX 05-APR-2001.
XX
XX 25-SEP-2000; 2000WO-US026383.
XX
XX 25-SEP-1999; 99US-0156113P.
XX
XX 27-SEP-1999; 99US-0156135P.
XX
XX 23-AUG-2000; 2000US-0227436P.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
XX
XX (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Schetter C, Vollmer J;
XX
XX WPI; 2001-273485/28.
XX
XX Vaccinating: against tumors, infectious diseases, allergies and asthma
XX using immunostimulatory Py-rich and TG nucleic acids.
XX
XX Claim 101; Page 49; 338pp; English.
XX
XX The present invention relates to a method for stimulating an immune
XX response. The method comprises administering an immunostimulatory nucleic
XX acid to a non-rodent subject in sufficient quantity to stimulate an
XX immune response. The present sequence is one such immunostimulatory
XX nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX also useful for preventing cancer, asthma, infectious disease, allergy or
XX immune deficiency. The present sequence can also be used to redirect a
XX Th2 to a Th1 immune response and to activate immune cells. Note: the
XX present sequence may have a phosphorothioate backbone
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 439
AAH41332/c
ID AAH41332 standard; DNA; 20 BP.
XX
AC AAH41332;
XX
XX 21-AUG-2001 (first entry)
XX
XX
XX Location/Qualifiers

```

```

DE Universal stem cell factor (SCF) related oligonucleotide SEQ ID NO:33.
XX
KW Stem cell factor; SCF; stem cell factor receptor; blood cell disorder;
KW gene therapy; PCR primer; mutagenesis; probe; ss.
XX
OS Synthetic.
XX
PN US6207454-B1.
XX
XX 27-MAR-2001.
XX
XX 31-DEC-1998; 98US-00224681.
XX
XX 16-OCT-1989; 89US-00422383.
XX
XX 11-JUN-1990; 90US-00537198.
XX
XX 24-AUG-1990; 90US-00573616.
XX
XX 01-OCT-1990; 90US-00589701.
XX
XX 25-NOV-1992; 92US-00982255.
XX
XX 21-DEC-1993; 93US-00173229.
XX
XX 21-MAY-1995; 95US-00449653.
XX
XX 12-JAN-1998; 98US-00005893.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zsebo KM, Bosseelman RA, Suggs SV, Martin FH;
XX
XX WPI; 2001-366062/38.
XX
XX Enhancing efficiency of transfer of polynucleotide into a target
XX mammalian cell in vitro, involves exposing cell that expresses a stem
XX cell factor receptor to stem cell factor, and introducing polynucleotide
XX into cell in vitro.
XX
XX Example 3; Fig 12C; 210pp; English.
XX
XX The present invention describes a method for enhancing (E) the efficiency
XX of transfer of a polynucleotide (I) into a target mammalian cell (II) in
XX vitro, comprising exposing (II) that expresses a stem cell factor (SCF)
XX receptor to a biologically active SCF, its analogue or fragment, which
XX induces cell proliferation, and introducing (I) to (II) in vitro.
XX
XX Exposure of SCF to (II) results in increased uptake of (I) into the cell.
XX The method is useful for enhancing the efficiency of the transfer of a
XX polynucleotide into a target mammalian cell in vitro. The method is
XX useful in gene therapy techniques. AAH41301 to AAH41364 and AAB98351 to
XX AAB98390 represent sequences used in the exemplification of the present
XX invention
XX
XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
Db 20 CTAATAAAAAAAAAAAAAAAAAA 1

RESULT 440
AAH46465/c
ID AAH46465 standard; DNA; 20 BP.
XX
AC AAH46465;
XX
XX 14-SEP-2001 (first entry)
XX
XX Oligonucleotide #13.
XX
XX Phosphorothioate; anti-viral therapy; stereochemical pathway; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers

```


PT of alkyl or alkoxy thiourea linkages in solution or on solid phase.
 XX
 PS Example 7; Fig 16; 48pp; English.
 XX
 CC The present sequence was used to demonstrate the ability of deoxynucleic
 CC S-Methylthiourea (DMNT) compounds to form triplexes with DNA oligomers. An
 CC increase in the C content of the oligos resulted in a large decrease in
 CC binding. This experiment was performed as an example of a method for
 CC preparing oligonucleotides comprising a backbone of alkyl or alkoxy
 CC thiourea linkages. The method is useful for preparing oligonucleotides
 CC for use in antisense or antigenic therapy, to inhibit production of
 CC proteins associated with genetic diseases, cardiovascular, inflammatory
 CC and neurocellular diseases, and for antiviral therapy, e.g. to treat
 CC human immunodeficiency virus, human cytomegalovirus, influenza and herpes
 CC infections. The compounds are also useful as diagnostic reagents to
 CC detect the presence or absence of the target DNA or RNA sequences to
 CC which they specifically bind and by antagonising the normal biological
 CC activity of a target protein, they can be used in the manipulation of
 CC tissue e.g. tissue differentiation, both in vivo and in ex vivo tissue
 CC cultures. The method provides an efficient and rapid solid-phase method
 CC for the synthesis of thiourea and S-methylthiourea
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 443
 AAS04112/C
 ID AAS04112 standard; DNA; 20 BP.
 XX
 AC AAS04112;
 XX
 DT 29-AUG-2001 (first entry)
 XX
 DE Human SCF (stem cell factor) cDNA universal PCR primer 220-7.
 XX
 KW Human; stem cell factor; SCF; early haematopoietic progenitor cell;
 KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
 KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
 KW PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 FN USG207417-B1.
 XX
 PD 27-MAR-2001.
 XX
 PF 07-JUN-1995; 95US-00482918.
 XX
 PR 16-OCT-1989; 89US-00422383.
 PR 11-JUN-1990; 90US-00537198.
 PR 24-AUG-1990; 90US-00573616.
 PR 01-OCT-1990; 90US-00589701.
 PR 21-DEC-1993; 93US-00172329.
 XX
 PA (ZSEB/) ZSEBO K M.
 PA (BOSS/) BOSSELMAN R A.
 PA (SUGG/) SUGGS S V.
 PA (MART/) MARTIN F H.
 XX
 PI Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
 XX
 DR WPI; 2001-298941/31.
 XX
 XX Novel nucleic acids encoding stem cell factor useful for treating
 PT disorders involving blood cells, e.g. leukemia, splenomegaly, Hodgkin's

PT disease, Kala azar, anemia and septicemia.
 XX
 PS Example 3; Fig 12C; 209pp; English.
 XX
 CC The present sequence for universal PCR primer 220-7 is 1 of 8 universal
 CC oligonucleotides (AAS04110-AAS04117) used in the isolation of the human
 CC SCF (stem cell factor) cDNA sequence. The present invention relates to
 CC novel stem cell factors (AAU02453-AAU02458, AAU02460, AAU02461) and the
 CC oligonucleotides encoding them. SCF stimulate primitive progenitor cells
 CC including early haematopoietic progenitor cells. The invention also
 CC describes SCF peptides (AAU02462-AAU02481) and the oligonucleotides
 CC (AAS04081-AAS04117) used in the isolation of human and rat SCF sequences.
 CC The polynucleotide encoding SCF is useful for producing SCF and useful in
 CC gene therapy. It is useful for treating disorders involving blood cells
 CC such as myelofibrosis, metastatic carcinoma, acute leukemia, multiple
 CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia, multiple
 CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
 CC disseminated fungus disease, fulminating septicemia, malaria, vitamin B12
 CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
 CC disorders such as piebaldism and vitiligo
 XX
 SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2707 CTAATAAAAAAAAAAAAAA 2726
 Db 20 CTAATAAAAAAAAAAAAAA 1
 RESULT 444
 AAH45787
 ID AAH45787 standard; DNA; 20 BP.
 XX
 AC AAH45787;
 XX
 DT 07-SEP-2001 (first entry)
 XX
 DE Human KUAPP70 gene PCR primer SEQ ID NO: 39.
 XX
 KW Nucleic acid amplification; adapter DNA; human; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO200138572-A1.
 XX
 PD 31-MAY-2001.
 XX
 PF 16-NOV-2000; 2000WO-JP08073.
 XX
 PR 19-NOV-1999; 99JP-00330726.
 PR 25-JUL-2000; 2000JP-00224663.
 XX
 PA (TAKI) TAKARA SHUZO CO LTD.
 XX
 PI Aoyagi K, Sasaki H, Terada M, Mineno J, Asada K, Kato I;
 XX
 DR WPI; 2001-355947/37.
 XX
 XX Amplifying nucleic acids with base sequences of mRNAs in sample while
 PT sustaining the ratio among them used to monitor mRNA expression,
 PT applicable in producing e.g. cRNA library and DNA microarrays.
 XX
 PS Example 1; Page 63; 67pp; Japanese.
 XX
 CC The present invention describes a method of amplifying nucleic acids,
 CC involving forming a single-stranded DNA to an mRNA in a sample with a
 CC primer, synthesising a DNA strand complementary to the single-stranded
 CC DNA to form a double-stranded DNA, adding a single or double-stranded
 CC adapter DNA to the double-stranded DNA, and amplifying the DNA strand
 CC using a second primer with a nucleic acid sequence in the adapter DNA.

CC This can be used to amplify nucleic acids to monitor mRNA expression,
 CC which is applicable in producing e.g. cRNA libraries, cDNA libraries, DNA
 CC microarrays or membrane arrays in gene engineering and gene expression
 CC analysis, and in drug development and health maintenance and management.
 CC The present sequence is a PCR primer described in the exemplification of
 CC the invention

SQ Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1745 CCTCCCTGTCGTGACCC 1764
 DB 1 CCTCCCTGTCGTGACCC 20
 |||||

RESULT 445
 AAF89092/C
 ID AAF89092 standard; DNA; 20 BP.

XX AAF89092;
 XX
 DT 13-JUL-2001 (first entry)
 XX
 DE Mammalian stem cell factor PCR primer SEQ ID NO: 33.

XX Human; rat; mammal; stem cell factor; SCF; cell growth stimulation;
 KW gene therapy; haematopoietic disorder; aplastic anaemia; leukaemia;
 KW neurological damage; intestinal damage; infertility; AIDS; SCID;
 KW severe combined immunodeficiency; PCR primer; ss.

XX Mammalia.
 XX
 PN US6207802-B1.

XX 27-MAR-2001.

XX 09-NOV-1994; 94US-00336728.

XX 16-OCT-1989; 89US-00422383.
 XX 11-JUN-1990; 90US-00537198.
 XX 24-AUG-1990; 90US-00573616.
 XX 01-OCT-1990; 90US-00589701.
 XX 25-NOV-1992; 92US-00982255.

XX (AMGE-) AMGEN INC.

PI Zeebo KM, Bosselman RA, Suggs SV, Martin FH;

XX WPI; 2001-353108/37.

XX Novel isolated non-human mammalian stem cell factor polypeptide
 PT stimulating growth of early hematopoietic progenitor cells, useful for
 PT treating aplastic anemia, lymphoma, Letterer-Siwe disease, Kala azar,
 PT sarcoidosis.

XX Example 3; Fig 12C; 209pp; English.

CC The present invention provides the protein and coding sequences of
 CC mammalian stem cell factors (SCFs). These are capable of stimulating the
 CC growth of early hematopoietic progenitor cells, neural stem cells and
 CC primordial germ stem cells. The sequences are useful in the treatment of
 CC leukaemias, haematopoietic disorders, aplastic anaemia, paroxysmal
 CC nocturnal haemoglobinuria, malaria, pigmentation disorders, neurological
 CC and intestinal damage, infertility, AIDS and severe combined
 CC immunodeficiency (SCID). The present sequence is primer used to amplify
 CC an SCF in the exemplification of the invention

SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2707 CTAAAAA 2726
 DB 20 CTAAAAA 1
 |||||

RESULT 446

AAH23890/C

ID AAH23890 standard; DNA; 20 BP.

XX AAH23890;

XX 07-AUG-2001 (first entry)

XX Human SCF (stem cell factor) cDNA universal PCR primer 220-7.
 DE
 XX Human; stem cell factor; SCF; early haematopoietic progenitor cell;
 KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
 KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
 KW PCR primer; ss.

XX Homo sapiens.

XX US6204363-B1.

XX 20-MAR-2001.

XX 25-NOV-1992; 92US-00982255.

XX 16-OCT-1989; 89US-00422383.

XX 11-JUN-1990; 90US-00537198.

XX 24-AUG-1990; 90US-00573616.

XX 01-OCT-1990; 90US-00589701.

XX 10-APR-1991; 91US-00684535.

XX (AMGE-) AMGEN INC.

XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;

XX WPI; 2001-256683/26.

XX New stem cell factor polypeptides and their analogs which stimulate
 PT growth of early hematopoietic progenitors, useful for treating aplastic
 PT anemia, carcinoma, multiple myeloma, vitiligo, kala azar, Hodgkin's
 PT disease.

XX Example 3; Fig 12C; 166pp; English.

XX The present sequence for universal PCR primer 220-7 is 1 of 8 universal
 CC oligonucleotides (AAH23888-AAH23895) used in the isolation of the human
 CC SCF (stem cell factor) cDNA sequence. The present invention relates to
 CC novel stem cell factors (AAB73561-AAB73568, AAB73571-AAB73576) and the
 CC polynucleotides encoding them. SCF stimulate primitive progenitor cells
 CC including early haematopoietic progenitor cells. The invention also
 CC describes SCF peptides (AAB73578-AAB73597) and the oligonucleotides
 CC (AAH23859-AAH23887) used in the isolation of human and rat SCF sequences.
 CC The polynucleotide encoding SCF is useful for producing SCF and useful in
 CC gene therapy. It is useful for treating disorders involving blood cells
 CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
 CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
 CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
 CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin
 CC B12 and folic acid deficiency, pyridoxine deficiency, and
 CC hypopigmentation disorders such as piebaldism and vitiligo

XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2707 CTAAGAAAAA 2726
Db 20 CTAAGAAAAA 1

RESULT 447
AAS04213/c
ID AAS04213 standard; DNA; 20 BP.
XX AC AAS04213;
XX DT 29-AUG-2001 (first entry)
XX DE Human SCF (stem cell factor) cDNA universal PCR primer 220-7.
XX KW Human; stem cell factor; SCF; early haematopoietic progenitor cell;
XX KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
XX KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
XX KW PCR primer; ss.
XX OS Homo sapiens.
XX PN US6218148-B1.
XX PD 17-APR-2001.
XX PF 21-DEC-1993; 93US-00172329.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 25-NOV-1992; 92US-00982255.
XX PA (AMGE-) AMGEN INC.
XX PI Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2001-281051/29.
XX DR
XX PT Isolated DNA sequence, encoding polypeptide product useful for
XX PT stimulating growth of early hematopoietic progenitor cells.
XX PS Example 3; Fig 12C; 167pp; English.
XX CC The present sequence for universal PCR primer 220-7 is 1 of 8 universal
XX CC oligonucleotides (AAS04211-AAS04218) used in the isolation of the human
XX CC SCF (stem cell factor) cDNA sequence. The present invention relates to
XX CC novel stem cell factors (AAU02761-AAU02767, AAU02770-AAU02775, AAU02797)
XX CC and the polynucleotides encoding them. SCF stimulate primitive progenitor
XX CC cells including early haematopoietic progenitor cells. The invention also
XX CC describes SCF peptides (AAU02777-AAU02794) and the oligonucleotides
XX CC (AAS04182-AAS04210) used in the isolation of human and rat SCF sequences.
XX CC The polynucleotide encoding SCF is useful for producing SCF and useful in
XX CC gene therapy. It is useful for treating disorders involving blood cells
XX CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
XX CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
XX CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
XX CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12
XX CC and folic acid deficiency, Pyridoxine deficiency, and hypopigmentation
XX CC disorders such as piebaldism and vitiligo.
XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 20 CTAAGAAAAA 1

RESULT 449
AAS04213/c
ID AAS04213 standard; DNA; 20 BP.
XX AC AAS04213;
XX DT 29-AUG-2001 (first entry)
XX DE Human SCF (stem cell factor) cDNA universal PCR primer 220-7.
XX KW Human; stem cell factor; SCF; early haematopoietic progenitor cell;
XX KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
XX KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
XX KW PCR primer; ss.
XX OS Homo sapiens.
XX PN US6218148-B1.
XX PD 17-APR-2001.
XX PF 21-DEC-1993; 93US-00172329.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 25-NOV-1992; 92US-00982255.
XX PA (AMGE-) AMGEN INC.
XX PI Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2001-281051/29.
XX DR
XX PT Isolated DNA sequence, encoding polypeptide product useful for
XX PT stimulating growth of early hematopoietic progenitor cells.
XX PS Example 3; Fig 12C; 167pp; English.
XX CC The present sequence for universal PCR primer 220-7 is 1 of 8 universal
XX CC oligonucleotides (AAS04211-AAS04218) used in the isolation of the human
XX CC SCF (stem cell factor) cDNA sequence. The present invention relates to
XX CC novel stem cell factors (AAU02761-AAU02767, AAU02770-AAU02775, AAU02797)
XX CC and the polynucleotides encoding them. SCF stimulate primitive progenitor
XX CC cells including early haematopoietic progenitor cells. The invention also
XX CC describes SCF peptides (AAU02777-AAU02794) and the oligonucleotides
XX CC (AAS04182-AAS04210) used in the isolation of human and rat SCF sequences.
XX CC The polynucleotide encoding SCF is useful for producing SCF and useful in
XX CC gene therapy. It is useful for treating disorders involving blood cells
XX CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
XX CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
XX CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
XX CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12
XX CC and folic acid deficiency, Pyridoxine deficiency, and hypopigmentation
XX CC disorders such as piebaldism and vitiligo.
XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 20 CTAAGAAAAA 1

```

```

RESULT 448
AAS10448/c
ID AAS10448 standard; DNA; 20 BP.
XX AC AAS10448;
XX DT 24-OCT-2001 (first entry)
XX DE Human stem cell factor (SCF) cDNA universal PCR primer 220-7.
XX KW Human; stem cell factor; SCF; haematopoietic progenitor cell;
XX KW blood disorder; Hodgkin's disease; vitamin B12; folic acid deficiency;
XX KW hypopigmentation disorder; viral disorder; AIDS; PCR primer; ss.
XX OS Homo sapiens.
XX PN US6248319-B1.
XX PD 19-JUN-2001.
XX PF 24-MAY-1995; 95US-00449653.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 10-APR-1991; 91US-00684535.
XX PR 25-NOV-1992; 92US-00982255.
XX PR 21-DEC-1993; 93US-00172329.
XX PA (ZSEB/) ZSEBO K M.
XX PA (BOSS/) BOSSELMAN R A.
XX PA (SUGG/) SUGGS S V.
XX PA (MART/) MARTIN F H.
XX PI Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2001-407312/43.
XX DR
XX PT Increasing the number of early hematopoietic progenitor cells in the
XX PT peripheral blood useful for the treatment of blood disorders including
XX PT Hodgkin's disease comprises the administration of human stem cell factor.
XX PS Example 3; Fig 12C; 210pp; English.
XX CC The present sequence for universal PCR primer 220-7 is 1 of 19 PCR
XX CC primers (AAS10435-AAS10453) used to amplify various portions of the human
XX CC SCF cDNA sequence. The sequence is described in an invention relating to
XX CC novel stem cell factors, the polynucleotides encoding them and methods
XX CC for producing the stem cell factors. The methods involve increasing the
XX CC number of early haematopoietic progenitor cells in human peripheral blood
XX CC by administering a haematopoietically effective human stem cell factor
XX CC polypeptide. The methods are useful for the treatment of blood disorders,
XX CC including myelofibrosis, myelosclerosis, osteopetrosis, metastatic
XX CC carcinoma, acute leukaemia, multiple myeloma, Hodgkin's disease,
XX CC lymphoma, Gaucher's disease, Niemann-Pick disease, refractory anaemia,
XX CC malaria, vitamin B12 and folic acid deficiency, hypopigmentation
XX CC disorders i.e. piebaldism and viral induced disorders, including AIDS
XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 20 CTAAGAAAAA 1

RESULT 449
AAS77742/c
ID AAS77742 standard; DNA; 20 BP.

```

XX ABS77742;
 AC
 XX
 DT 13-DEC-2002 (first entry)
 DE
 XX Angiogenesis inhibitory oligonucleotide #226.
 DE
 XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
 KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
 KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
 KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
 KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
 KW plaque neovascularisation; telangiectasia; haemophilic joint;
 KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
 KW scleroderma; hypertrophic scar.
 XX
 OS Synthetic.
 XX
 PN WO200253141-A2.
 XX
 PD 11-JUL-2002.
 XX
 PF 14-DEC-2001; 2001WO-US048458.
 XX
 PR 14-DEC-2000; 2000US-0255534P.
 XX
 PA (COLE-) COLEY PHARM GROUP INC.
 XX
 PI Bratzler RL;
 XX
 DR WPI; 2002-566690/60.
 XX
 PT Inhibiting angiogenesis in a subject, involves administering at least one
 PT antiangiogenic nucleic acid molecule to the subject.
 XX
 PS Claim 2; Page 23; 276pp; English.
 XX
 CC The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 450
 ABS78072/c
 ID ABS78072 standard; DNA; 20 BP.
 XX
 AC ABS78072;
 XX
 DT 13-DEC-2002 (first entry)
 DE
 XX Angiogenesis inhibitory oligonucleotide #556.
 DE
 XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
 KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
 KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
 KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
 KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
 KW plaque neovascularisation; telangiectasia; haemophilic joint;
 KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
 KW scleroderma; hypertrophic scar.
 XX
 OS Synthetic.
 XX
 PN WO200253141-A2.
 XX
 PD 11-JUL-2002.
 XX
 PF 14-DEC-2001; 2001WO-US048458.
 XX
 PR 14-DEC-2000; 2000US-0255534P.
 XX
 PA (COLE-) COLEY PHARM GROUP INC.
 XX
 PI Bratzler RL;
 XX
 DR WPI; 2002-566690/60.
 XX
 PT Inhibiting angiogenesis in a subject, involves administering at least one
 PT antiangiogenic nucleic acid molecule to the subject.
 XX
 PS Claim 2; Page 23; 276pp; English.
 XX
 CC The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 450
 ABS78072/c
 ID ABS78072 standard; DNA; 20 BP.
 XX
 AC ABS78072;
 XX
 DT 13-DEC-2002 (first entry)
 DE
 XX Angiogenesis inhibitory oligonucleotide #556.
 DE
 XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
 KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
 KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
 KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
 KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
 KW plaque neovascularisation; telangiectasia; haemophilic joint;
 KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
 KW scleroderma; hypertrophic scar.

KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
 KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
 KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
 KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
 KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
 KW plaque neovascularisation; telangiectasia; haemophilic joint;
 KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
 KW scleroderma; hypertrophic scar.
 XX
 OS Synthetic.
 XX
 PN WO200253141-A2.
 XX
 PD 11-JUL-2002.
 XX
 PF 14-DEC-2001; 2001WO-US048458.
 XX
 PR 14-DEC-2000; 2000US-0255534P.
 XX
 PA (COLE-) COLEY PHARM GROUP INC.
 XX
 PI Bratzler RL;
 XX
 DR WPI; 2002-566690/60.
 XX
 PT Inhibiting angiogenesis in a subject, involves administering at least one
 PT antiangiogenic nucleic acid molecule to the subject.
 XX
 PS Claim 2; Page 29; 276pp; English.
 XX
 CC The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 451
 ABS78076
 ID ABS78076 standard; DNA; 20 BP.
 XX
 AC ABS78076;
 XX
 DT 13-DEC-2002 (first entry)
 DE
 XX Angiogenesis inhibitory oligonucleotide #560.
 DE
 XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
 KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
 KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
 KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
 KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
 KW plaque neovascularisation; telangiectasia; haemophilic joint;
 KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
 KW scleroderma; hypertrophic scar.

KW scleroderma; hypertrophic scar.
 OS Synthetic.
 PN WO200253141-A2.
 XX
 PD 11-JUL-2002.
 XX
 PF 14-DEC-2001; 2001WO-US048458.
 XX
 PR 14-DEC-2000; 2000US-0255534P.
 XX
 PA (COLE-) COLEY PHARM GROUP INC.
 XX
 PI Bratzler RL;
 XX
 DR WPI; 2002-566690/60.
 XX
 XX Inhibiting angiogenesis in a subject, involves administering at least one
 PT antiangiogenic nucleic acid molecule to the subject.
 PT
 XX
 PS Claim 2; Page 29; 276pp; English.
 XX
 CC The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubecosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 452
 ABL39402/C
 ID ABL39402 standard; DNA; 20 BP.
 XX
 AC ABL39402;
 XX
 XX 16-APR-2002 (first entry)
 DT
 XX Immunostimulatory nucleic acid SEQ ID NO: 838.
 DE
 XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
 KW angiogenesis; metastasis; cytostatic; phosphorothioate backbone; ss.
 XX
 OS Synthetic.
 XX
 PH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone"
 XX
 PN WO200197843-A2.
 XX
 PD 27-DEC-2001.

XX 22-JUN-2001; 2001WO-US020154.
 PF
 XX 22-JUN-2000; 2000US-0213346P.
 PR
 XX (IOWA) UNIV IOWA RES FOUND.
 PA
 XX Weiner G, Hartmann G;
 PI
 XX WPI; 2002-154611/20.
 DR
 XX Treating or preventing cancer, such as basal cell carcinoma, comprises
 PT administering immunostimulatory nucleic acids that induce expression of
 PT cell surface antigens and antibodies to a subject having or at risk of
 PT developing cancer.
 PT
 XX Disclosure; Page 309; 312pp; English.
 PS
 XX The present invention relates to methods for treating or preventing
 CC cancer, involving administering to a subject having or at risk of
 CC developing cancer immunostimulatory nucleic acids that induce expression
 CC of cell surface antigens and antibodies. The methods are useful for
 CC treating or preventing cancer such as basal cell carcinoma, bladder
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 CC breast cancer, cervical cancer, colon and rectum cancer, connective
 CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
 CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 CC present sequence is an immunostimulatory oligonucleotide described in the
 CC exemplification of the invention
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 453
 ABL38648
 ID ABL38648 standard; DNA; 20 BP.
 XX
 AC ABL38648;
 XX
 XX 16-APR-2002 (first entry)
 DT
 XX Immunostimulatory nucleic acid SEQ ID NO: 2.
 DE
 XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
 KW angiogenesis; metastasis; cytostatic; ss.
 XX
 OS Synthetic.
 XX
 PN WO200197843-A2.
 XX
 PD 27-DEC-2001.
 XX
 XX 22-JUN-2001; 2001WO-US020154.
 PF
 XX 22-JUN-2000; 2000US-0213346P.
 PR
 XX (IOWA) UNIV IOWA RES FOUND.
 PA
 XX Weiner G, Hartmann G;
 PI
 XX WPI; 2002-154611/20.
 DR
 XX

PT Treating or preventing cancer, such as basal cell carcinoma, comprises
PT administering immunostimulatory nucleic acids that induce expression of
PT cell surface antigens and antibodies to a subject having or at risk of
PT developing cancer.

XX Disclosure; Page 95; 312pp; English.

XX The present invention relates to methods for treating or preventing
CC cancer, involving administering to a subject having or at risk of
CC developing cancer immunostimulatory nucleic acids that induce expression
CC of cell surface antigens and antibodies. The methods are useful for
CC treating or preventing cancer such as basal cell carcinoma, bladder
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
CC breast cancer, cervical cancer, colon and rectum cancer, connective
CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx
CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC present sequence is an immunostimulatory oligonucleotide described in the
CC exemplification of the invention

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 454
ABL39403/C
ID ABL39403 standard; DNA; 20 BP.
XX
AC ABL39403;
XX
DT 16-APR-2002 (first entry)
DE Immunostimulatory nucleic acid SEQ ID NO: 839.
XX
XX Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
KW angiogenesis; metastasis; cytostatic; ss.
XX
XX Synthetic.
XX
XX WO200197843-A2.
XX
XX 27-DEC-2001.
XX
XX 22-JUN-2001; 2001WO-US020154.
XX
XX 22-JUN-2000; 2000US-0213346P.
XX
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX Weiner G, Hartmann G;
XX
XX WPI; 2002-154611/20.
XX
XX Treating or preventing cancer, such as basal cell carcinoma, comprises
PT administering immunostimulatory nucleic acids that induce expression of
PT cell surface antigens and antibodies to a subject having or at risk of
PT developing cancer.

XX Disclosure; Page 309; 312pp; English.

XX The present invention relates to methods for treating or preventing
CC cancer, involving administering to a subject having or at risk of
CC developing cancer immunostimulatory nucleic acids that induce expression
CC of cell surface antigens and antibodies. The methods are useful for

CC treating or preventing cancer such as basal cell carcinoma, bladder
CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
CC breast cancer, cervical cancer, colon and rectum cancer, connective
CC tissue cancer, esophageal cancer, eye cancer, kidney cancer, larynx
CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
CC present sequence is an immunostimulatory oligonucleotide described in the
CC exemplification of the invention

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 455
ABL54775/C
ID ABL54775 standard; DNA; 20 BP.
XX
AC ABL54775;
XX
DT 10-JUN-2002 (first entry)
DE CD14 receptor PCR primer SEQ ID NO 9.
XX
XX Angiotensin-I converting enzyme; ACE; CD14; receptor; SNP;
KW single-nucleotide polymorphism; PCR; primer; ss.
XX
XX Synthetic.
XX
XX JP2002034599-A.
XX
XX 05-FEB-2002.
XX
XX 26-JUL-2000; 2000JP-00225354.
XX
XX 26-JUL-2000; 2000JP-00225354.
XX
XX (TOYM) TOYOCO KK.
XX
XX WPI; 2002-275727/32.
XX
XX Detecting 1 base polymorphism on a sequence of a chromosome or it's
PT fragment.
PT
XX
XX Example 2; Page 10; 10pp; Japanese.

XX The invention relates to a method for detecting 1 base polymorphism on
CC the sequence of a chromosome or its fragment in which a sample nucleic
CC acid is reacted with a reaction liquor containing a nucleic acid primer
CC having a base adjacent to the polymorphic base at its 3'-end, one
CC dideoxynucleotide corresponding to a polymorphic base having a
CC distinguishable feature or its mixture, DNA polymerase and a composition
CC required for its activity expression to detect the presence of taking
CC dideoxynucleotide in the nucleic acid primer and to detect the type of
CC the base to be specified. The method is used for detecting 1 base
CC polymorphism on the sequence of a chromosome or its fragment. The present
CC sequence is that of a PCR primer, useful in examples of the invention

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728


```

Db      20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 456
ABK65035
ID      ABK65035 standard; DNA; 20 BP.
XX
AC      ABK65035;
XX
DT      02-JUL-2002 (first entry)
XX
DE      Nanoparticle-oligonucleotide #55.
XX
KW      Nanoparticle-oligonucleotide; nanofabrication; nucleic acid detection;
KW      ss.
XX
OS      Synthetic.
XX
PN      WO200218643-A2.
XX
PD      07-MAR-2002.
XX
PF      10-AUG-2001; 2001WO-US025237.
XX
PR      11-AUG-2000; 2000US-0224631P.
PR      08-DEC-2000; 2000US-0254392P.
PR      11-DEC-2000; 2000US-0255235P.
PR      12-JAN-2001; 2001US-00760500.
PR      28-MAR-2001; 2001US-00820279.
XX
PA      (NANO-) NANOSPHERE INC.
XX
PI      Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
PI      Taton TA, Garimella V, Li Z, Park S;
XX
DR      WPI; 2002-258024/30.
XX
PT      Detecting nucleic acid, useful for diagnosis of genetic, viral or
PT      bacterial disease, comprises hybridizing nanoparticles with attached
PT      oligonucleotides to nucleic acid and detecting change brought about by
PT      hybridization.
XX
PS      Example 18; Page 410; 412pp; English.
XX
CC      The invention relates to a method of detecting a nucleic acid (NA) having
CC      at least 2 portions comprising: (a) providing nanoparticles (NP) with
CC      attached oligonucleotides (OGN), where OGN has a sequence complementary
CC      to the sequence of NA; (b) contacting NA and NP under conditions
CC      effective to allow hybridisation of OGN with NA; and (c) observing a
CC      detectable change brought about by hybridisation of OGN with NA. The
CC      method is useful for detecting a nucleic acid, separating a selected
CC      nucleic acid from others and methods of nanofabrication. Detecting
CC      analytes such as nucleic acids and proteins are useful for the diagnosis
CC      of genetic, bacterial and viral diseases. The OGN-NP conjugates that use
CC      cyclic disulphide linkers improve the sensitivity of diagnostic assays.
CC      In particular assays using OGN-NP conjugates prepared using linkers
CC      comprising a steroid residue attached to a cyclic disulphide have been
CC      found to be approximately 10 times more sensitive than assays employing
CC      conjugates prepared using alkanethiols or acyclic disulphides as the
CC      linker. The OGN-NP conjugates are stable allowing them to be used
CC      directly in PCR solutions. Therefore conjugates added as probes to a DNA
CC      target to be PCR amplified can be carried through the 30 or 40 heating
CC      cooling cycles of the PCR and are still able to detect the amplicons
CC      without opening the tubes and causing contamination. ABK64981-ABK65055
CC      represent nanoparticle-oligonucleotides of the invention
XX
SQ      Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db      1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 457
ABK65050
ID      ABK65050 standard; DNA; 20 BP.
XX
AC      ABK65050;
XX
DT      02-JUL-2002 (first entry)
XX
DE      Nanoparticle-oligonucleotide #70.
XX
KW      Nanoparticle-oligonucleotide; nanofabrication; nucleic acid detection;
KW      ss.
XX
OS      Synthetic.
XX
PN      WO200218643-A2.
XX
PD      07-MAR-2002.
XX
PF      10-AUG-2001; 2001WO-US025237.
XX
PR      11-AUG-2000; 2000US-0224631P.
PR      08-DEC-2000; 2000US-0254392P.
PR      11-DEC-2000; 2000US-0255235P.
PR      12-JAN-2001; 2001US-00760500.
PR      28-MAR-2001; 2001US-00820279.
XX
PA      (NANO-) NANOSPHERE INC.
XX
PI      Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
PI      Taton TA, Garimella V, Li Z, Park S;
XX
DR      WPI; 2002-258024/30.
XX
PT      Detecting nucleic acid, useful for diagnosis of genetic, viral or
PT      bacterial disease, comprises hybridizing nanoparticles with attached
PT      oligonucleotides to nucleic acid and detecting change brought about by
PT      hybridization.
XX
PS      Example 24; Fig 44; 412pp; English.
XX
CC      The invention relates to a method of detecting a nucleic acid (NA) having
CC      at least 2 portions comprising: (a) providing nanoparticles (NP) with
CC      attached oligonucleotides (OGN), where OGN has a sequence complementary
CC      to the sequence of NA; (b) contacting NA and NP under conditions
CC      effective to allow hybridisation of OGN with NA; and (c) observing a
CC      detectable change brought about by hybridisation of OGN with NA. The
CC      method is useful for detecting a nucleic acid, separating a selected
CC      nucleic acid from others and methods of nanofabrication. Detecting
CC      analytes such as nucleic acids and proteins are useful for the diagnosis
CC      of genetic, bacterial and viral diseases. The OGN-NP conjugates that use
CC      cyclic disulphide linkers improve the sensitivity of diagnostic assays.
CC      In particular assays using OGN-NP conjugates prepared using linkers
CC      comprising a steroid residue attached to a cyclic disulphide have been
CC      found to be approximately 10 times more sensitive than assays employing
CC      conjugates prepared using alkanethiols or acyclic disulphides as the
CC      linker. The OGN-NP conjugates are stable allowing them to be used
CC      directly in PCR solutions. Therefore conjugates added as probes to a DNA
CC      target to be PCR amplified can be carried through the 30 or 40 heating
CC      cooling cycles of the PCR and are still able to detect the amplicons
CC      without opening the tubes and causing contamination. ABK64981-ABK65055
CC      represent nanoparticle-oligonucleotides of the invention
XX
SQ      Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db      1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 458
AAD35465/C
ID      AAD35465 standard; DNA; 20 BP.
AC      AAD35465;
XX
XX
XX
XX      25-JUL-2002 (first entry)
XX
XX      Rat SCF 5' cDNA amplifying PCR primer, 220-7.
XX
XX      Rat; stem cell factor; SCF protein; leucopaenia; thrombocytopaenia;
KW      anaemia; myelosuppression; nerve damage; myeloproliferative disorder;
KW      infertility; neoplasia; myelofibrosis; myelosclerosis; osteopetrosis;
KW      metastatic carcinoma; acute leukaemia; multiple myeloma; sarcoidosis;
KW      Hodgkin's disease; lymphoma; Gaucher's disease; Niemann-Pick disease;
KW      Letterer-Siwe disease; refractory erythroblastic anaemia; Kala azar;
KW      Di Guglielmo syndrome; congestive splenomegaly; splenic pancytopenia;
KW      disseminated fungus disease; Fulminating septicaemia; piebaldism; AIDS;
KW      acquired immune deficiency syndrome; malaria; military tuberculosis;
KW      pyridoxine deficiency; vitamin B12 deficiency; folic acid deficiency;
KW      Diamond Blackfan anaemia; hypopigmentation disorder; vitiligo; PCR;
KW      primer; ss.
XX
XX      Rattus sp.
OS
XX
XX
XX      US2002018763-A1.
XX
XX      14-FEB-2002.
XX
XX      12-JAN-1998; 98US-00005243.
XX
XX      24-MAY-1995; 95US-00449653.
XX
XX      (ZSEB/) ZSEBO K M.
PA      (BOSS/) BOSSELMAN R A.
PA      (SUGG/) SUGGS S V.
PA      (MART/) MARTIN F H.
XX
XX      Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
PI
XX
XX      WPI; 2002-350789/38.
XX
XX      Novel non-naturally-occurring stem cell factor polypeptide, useful for
PT      treating leucopenia, thrombocytopenia, anemia and for enhancing
PT      engraftment of bone marrow during transplantation in a mammal.
XX
XX      Example 3; Fig 12C; 217pp; English.
XX
XX      The present invention relates to novel non-naturally-occurring stem cell
CC      factor (SCF) polypeptides having an amino acid sequence sufficiently
CC      duplicative of that of naturally-occurring SCF to allow possession of
CC      haematopoietic biological activity of naturally occurring SCF. Sequences
CC      of the invention are useful for treating leucopaenia, thrombocytopaenia,
CC      anaemia and for enhancing bone marrow recovery in treatment of radiation,
CC      engraftment of bone marrow during transplantation in mammals and chemical
CC      or chemotherapeutic induced bone marrow aplasia or myelosuppression. They
CC      are also useful for treating acquired immune deficiency in a human, nerve
CC      damage, neoplasia, infertility, myeloproliferative disorder, intestinal
CC      damage in a mammal. SCF sequences are useful for preparing biologically
CC      active polymer polypeptide adduct, for enhancing transfection of early
CC      haematopoietic progenitor cells with a gene, and transfer of a gene into
CC      a mammal. They are useful for treating myelofibrosis, myelosclerosis,
CC      osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma,
CC      Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease,
CC      Letterer-Siwe disease, refractory erythroblastic anaemia, Di Guglielmo
CC      syndrome, congestive splenomegaly, Kala azar, sarcoidosis, primary
CC      splenic pancytopenia, disseminated fungus disease, malaria, military

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CC      tuberculosis, Fulminating septicaemia, pyridoxine deficiency, vitamin B12
CC      and folic acid deficiency, Diamond Blackfan anaemia, hypopigmentation
CC      disorders such as piebaldism, AIDS (acquired immune deficiency syndrome)
CC      and vitiligo. The present sequence is a PCR primer which is used for
CC      amplifying the 5' end of rat SCF cDNA. This sequence is used in the
CC      exemplification of the invention
XX
XX      Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SQ
XX
XX      Query Match      0.7%; Score 20; DB 1; Length 20;
XX      Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY      2707 CTAAAAAAAAAAAAAAAAAAAA 2726
Db      20 CTAAAAAAAAAAAAAAAAAAAA 1

RESULT 459
ABS73849/C
ID      ABS73849 standard; DNA; 20 BP.
AC      ABS73849;
XX
XX      05-DEC-2002 (first entry)
XX
XX      SCF universal oligonucleotide 220-7.
XX
XX      Stem cell factor; SCF; blood-forming system; blood cell disorder;
KW      haematopoietic system; metastatic carcinoma; acute leukaemia;
KW      multiple myeloma; Hodgkin's disease; lymphoma; malaria; vitiligo;
KW      refractory erythroblastic anaemia; military tuberculosis; cytostatic;
KW      disseminated fungus disease; haematopoietic; tuberculostatic;
KW      antianaemic; antifungal; antimalarial; dermatological; ss.
XX
XX      Synthetic.
OS
XX
XX      EP1241258-A2.
XX
XX      18-SEP-2002.
XX
XX      04-OCT-1990; 2002EP-00008587.
XX
XX      16-OCT-1989; 89US-00422383.
XX      11-JUN-1990; 90US-00537198.
XX      24-AUG-1990; 90US-00573616.
XX      28-SEP-1990; 90WO-US005548.
XX      01-OCT-1990; 90US-00589701.
XX      04-OCT-1990; 90EP-00310899.
XX      04-OCT-1990; 95EP-00105391.
XX      (AMGE-) AMGEN INC.
XX
XX      Zeebo KM, Suggs SV, Bosselman RA, Martin FH;
PI
XX
XX      WPI; 2002-684093/74.
XX
XX      Production of a human stem cell factor (SCF) polypeptide for treating
PT      disorders involving blood cells, such as leukemia, comprises culturing
PT      mammalian cells comprising non-human SCF promoter DNA linked to DNA
PT      encoding the human SCF.
XX
XX      Example 3; Fig 12C; 120pp; English.
XX
XX      The present invention relates to novel stem cell factors (SCFs),
CC      polynucleotide sequences encoding the SCFs, and methods of producing
CC      them. SCFs are involved in the blood-forming (haematopoietic) system in
CC      mammals, particularly humans. The method of the invention is useful for
CC      the production of human SCF. The stem cell factors are useful to treat
CC      disorders involving blood cells e.g. metastatic carcinoma, acute
CC      leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, refractory
CC      erythroblastic anaemia, military tuberculosis, disseminated fungus
CC      disease, malaria, and vitiligo. The present sequence representing a

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CC universal oligonucleotide for SCF DNA is used in the examples of the
CC present invention
XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SQ

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2707 CTAAGAAAAAAGAAAAA 2726
Db 20 CTAAGAAAAAAGAAAAA 1

RESULT 460
AAL45122/c
ID AAL45122 standard; DNA; 20 BP.
XX AC AAL45122;
XX DT 24-MAY-2002 (first entry)
XX DE Oligonucleotide synthesis method related DNA #1.
XX KW Oligonucleotide synthesis; polynucleotide array; protecting group;
XX KW oxidation; ss.
XX OS Synthetic.
XX PN EPI176151-A1.
XX PD 30-JAN-2002.
XX PF 27-JUL-2001; 2001EP-00118360.
XX PR 28-JUL-2000; 2000US-00627249.
XX PS (AGIL-) AGILENT TECHNOLOGIES INC.
XX PI Dellinger DJ, Perbost MGM, Betley JR, Caruthers M;
XX PFPI; 2002-156732/21.
XX DR
XX PT Synthesis of polynucleotide useful during fabrication of an array
XX PT involves coupling nucleoside phosphoramidite and a solid-supported
XX PT nucleoside and treating the product with an oxidation/deprotection
XX PT composition.
XX PS Example 1; Page 15; 36pp; English.
XX CC The present invention relates to a method for the synthesis of a
XX CC polynucleotide which involves coupling a second nucleoside to a first
XX CC nucleoside through a phosphite linkage, where the second nucleoside has a
XX CC non-carbonate protecting group protecting a hydroxyl, and exposing the
XX CC product to a composition which concurrently oxidizes the phosphite formed
XX CC to a phosphate and deprotects the protected hydroxyl of the second
XX CC nucleoside. The method is useful for synthesizing the polynucleotides,
XX CC for carrying out either 3' to 5' or 5' to 3' synthesis and for
XX CC fabricating an addressable array of polynucleotides on a substrate. The
XX CC present sequence is an oligonucleotide produced to demonstrate the method
XX CC of the invention
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAGAAAAA 2728
Db 20 AAAAAAAGAAAAA 1

RESULT 461
ABL36232
ID ABL36232 standard; DNA; 20 BP.
XX AC ABL36232;
XX DT 08-APR-2002 (first entry)
XX DE M tuberculosis rRNA probe SEQ ID NO: 83.
XX KW Skin disorder; psoriasis; atopic dermatitis; allergic contact dermatitis;
XX KW alopecia areata; skin cancer; Mycobacterium vaccae; melanoma; cytostatic;
XX KW antipsoriatic; dermatological; antiinflammatory; antiallergic;
XX KW Th2 immune response; immunomodulatory; probe; ss.
XX OS Mycobacterium tuberculosis.
XX PN US6328978-B1.
XX PD 11-DEC-2001.
XX PF 02-JUN-1999; 99US-00324542.
XX PR 23-DEC-1997; 97US-00997080.
XX PS (GENE-) GENESIS RES & DEV CORP LTD.
XX PI Watson JD, Tan PLJ, Prestidge R;
XX PFPI; 2002-138361/18.
XX DR
XX PT Inhibiting skin inflammation associated with skin disorder e.g.
XX PT psoriasis, by administering composition comprising delipidated and
XX PT deglycolipidated Mycobacterium vaccae cells or Mycobacterium vaccae
XX PT culture filtrate.
XX PS Example 5; Col 99-100; 116pp; English.
XX CC The present invention relates to a method of inhibiting skin inflammation
XX CC associated with a skin disorder selected from psoriasis, atopic
XX CC dermatitis and allergic contact dermatitis, which involves administering
XX CC a composition containing delipidated and deglycolipidated Mycobacterium
XX CC vaccae cells or M. vaccae culture filtrate. The skin disorder to be
XX CC treated may also include alopecia areata, and skin cancers such as basal
XX CC cell carcinoma, squamous cell carcinoma and melanoma. The composition
XX CC acts by inhibiting the Th2 immune response. The present sequence is a
XX CC probe described in the exemplification of the invention
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAGAAAAA 2728
Db 1 AAAAAAAGAAAAA 20

RESULT 462
ABS64673
ID ABS64673 standard; DNA; 20 BP.
XX AC ABS64673;
XX DT 15-NOV-2002 (first entry)
XX DE Nucleic acid detection method associated polynucleotide #55.
XX KW Nucleic acid detection method; nanoparticle-oligonucleotide conjugate;
XX KW nanoparticle; viral RNA detection; bacterial DNA detection;
XX KW fungal DNA detection; nanoprobe conjugate; ss.
XX

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OS Synthetic.
XX WO200246472-A2.
XX
XX
XX
XX
XX 13-JUN-2002.
XX
XX
XX 07-DEC-2001; 2001WO-US046418.
XX
XX 08-DEC-2000; 2000US-0254392P.
XX 08-DEC-2000; 2000US-0254418P.
XX 11-DEC-2000; 2000US-0255235P.
XX 11-DEC-2000; 2000US-0255236P.
XX 12-JAN-2001; 2001US-00760500.
XX 28-MAR-2001; 2001US-00820279.
XX 09-APR-2001; 2001US-0282640P.
XX 10-AUG-2001; 2001US-00927777.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX Taton TA, Garimella V, Li Z, Park S;
XX WPI; 2002-608256/65.
XX
XX Detecting nucleic acid having two portions, by providing nanoparticles
XX having oligonucleotides attached to it, contacting nucleic acid and
XX nanoparticles to allow hybridization, and observing detectable change.
XX
XX Example 18; Page 437; 442pp; English.
XX
XX The invention describes a method of detecting (M1) a nucleic acid having
XX two portions, involving providing nanoparticles having oligonucleotides
XX attached to it, which has a sequence complementary to sequence of two
XX portions of nucleic acid, contacting nucleic acid and nanoparticles, to
XX allow hybridisation of oligonucleotides with two or more portions of
XX nucleic acid, and observing a detectable change brought about by
XX hybridisation. (M1), nanoparticles (I), nanoparticle-oligonucleotide
XX conjugates (II) and the aggregate probe are useful for detecting two or
XX more nucleic acids (from a biological source) having at least two
XX portions, such as viral RNA, bacterial or fungal DNA, a gene associated
XX with a disease, synthetic, or structurally-modified natural or synthetic
XX RNA or DNA, or a product of a polymerase chain reaction amplification.
XX (II) is useful for preparing a nanoprobe conjugate for detecting an
XX analyte, and for detecting a nucleic acid bound to an electrode surface.
XX (I) and (II) are useful for fabrication, and for separating a selected
XX nucleic acid having two portions from other nucleic acids. (I), (II) and
XX the aggregate probe are useful for detecting an analyte (especially
XX polyvalent analyte) in a sample. This sequence represents a
XX polynucleotide used to demonstrate the method of the invention
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 463
ABS64688
ID ABS64688 standard; DNA; 20 BP.
XX
XX ABS64688;
XX
XX 15-NOV-2002 (first entry)
XX
XX Nucleic acid detection method associated polynucleotide #70.
XX
XX Nucleic acid detection method; nanoparticle-oligonucleotide conjugate;
XX nanoparticle; viral RNA detection; bacterial DNA detection;
KW

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KW fungal DNA detection; nanoprobe conjugate; ss.
XX Synthetic.
XX
XX WO200246472-A2.
XX
XX
XX
XX 13-JUN-2002.
XX
XX
XX 07-DEC-2001; 2001WO-US046418.
XX
XX 08-DEC-2000; 2000US-0254392P.
XX 08-DEC-2000; 2000US-0254418P.
XX 11-DEC-2000; 2000US-0255235P.
XX 11-DEC-2000; 2000US-0255236P.
XX 12-JAN-2001; 2001US-00760500.
XX 28-MAR-2001; 2001US-00820279.
XX 09-APR-2001; 2001US-0282640P.
XX 10-AUG-2001; 2001US-00927777.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX Taton TA, Garimella V, Li Z, Park S;
XX WPI; 2002-608256/65.
XX
XX Detecting nucleic acid having two portions, by providing nanoparticles
XX having oligonucleotides attached to it, contacting nucleic acid and
XX nanoparticles to allow hybridization, and observing detectable change.
XX
XX Example 24; Fig 44; 442pp; English.
XX
XX The invention describes a method of detecting (M1) a nucleic acid having
XX two portions, involving providing nanoparticles having oligonucleotides
XX attached to it, which has a sequence complementary to sequence of two
XX portions of nucleic acid, contacting nucleic acid and nanoparticles, to
XX allow hybridisation of oligonucleotides with two or more portions of
XX nucleic acid, and observing a detectable change brought about by
XX hybridisation. (M1), nanoparticles (I), nanoparticle-oligonucleotide
XX conjugates (II) and the aggregate probe are useful for detecting two or
XX more nucleic acids (from a biological source) having at least two
XX portions, such as viral RNA, bacterial or fungal DNA, a gene associated
XX with a disease, synthetic, or structurally-modified natural or synthetic
XX RNA or DNA, or a product of a polymerase chain reaction amplification.
XX (II) is useful for preparing a nanoprobe conjugate for detecting an
XX analyte, and for detecting a nucleic acid bound to an electrode surface.
XX (I) and (II) are useful for fabrication, and for separating a selected
XX nucleic acid having two portions from other nucleic acids. (I), (II) and
XX the aggregate probe are useful for detecting an analyte (especially
XX polyvalent analyte) in a sample. This sequence represents a
XX polynucleotide used to demonstrate the method of the invention
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 464
ABN87103/C
ID ABN87103 standard; DNA; 20 BP.
XX
XX ABN87103;
XX
XX 30-JUL-2002 (first entry)
XX
XX Capture probe CP5' SEQ ID NO:23.
XX

```

KW Protein scaffold; antibody; binding protein; immunoglobulin;
 KW tumour necrosis factor alpha; TNF-alpha; protein framework; probe; ss.
 XX Synthetic.
 OS
 XX WO200232925-A2.
 PN
 XX
 XX 25-APR-2002.
 PD
 XX
 XX 16-OCT-2001; 2001WO-US032233.
 PF
 XX
 XX 16-OCT-2000; 2000US-00688566.
 PR
 XX
 XX (PHYL-) PHYLUS INC.
 PA
 XX
 XX Lipovsek D, Wagner RW, Kuimelis RG;
 PI
 XX
 XX WPI; 2002-444238/47.
 DR
 XX
 XX New non-antibody proteins having an immunoglobulin fold, useful in
 PT research, therapeutic or diagnostic fields, particularly as scaffolds for
 PT designing proteins with specific properties, e.g. for binding any antigen
 PT of interest.
 PS
 XX
 XX Disclosure; Page 58; 94pp; English.
 PS
 XX
 XX The present invention describes a non-antibody protein, comprising a
 CC domain having an immunoglobulin-like fold, derived from a reference
 CC protein having a mutated amino acid sequence, where the non-antibody
 CC protein binds with a Kd at least as tight as 10 nM to a compound that is
 CC not bound as tightly by the reference protein. The non-antibody protein
 CC is useful as scaffolds for selecting or designing a protein framework
 CC with specific and favourable properties, e.g. for binding any antigen of
 CC interest, or for destroying or inactivating antibody molecules. The non-
 CC antibody protein is also useful in all areas where antibodies are used,
 CC e.g. research, therapeutic or diagnostic fields, and for screening novel
 CC binding proteins useful in the above-mentioned fields. The present
 CC proteins have thermodynamic properties superior to those of natural
 CC antibodies, and can be evolved rapidly in vitro. The present proteins or
 CC antibody mimics exhibit improved biophysical properties, such as
 CC stability under reducing conditions and solubility at high
 CC concentrations. In addition, these molecules are readily expressed and
 CC folded in prokaryotic systems (e.g. Escherichia coli), in eukaryotic
 CC systems (e.g. yeast), or in in vitro translation systems (e.g. rabbit
 CC reticulocyte lysate system). Furthermore, these proteins are extremely
 CC amenable to affinity maturation techniques involving multiple cycles of
 CC selection, e.g. in vitro selection using RNA-protein fusion technology,
 CC phage display or yeast display systems. The present sequence is used in
 CC the exemplification of the present invention
 XX
 XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 465
 AAL61645
 ID AAL61645 standard; DNA; 20 BP.
 XX
 XX AAL61645;
 AC
 XX 22-SEP-2003 (first entry)
 DT
 XX
 XX Thiol-modified oligo #4 used in the nucleic acid detection method.
 DE
 XX
 XX Nucleic acid detection; fabrication; ss.
 KW
 XX

OS Unidentified.
 XX WO2003035829-A2.
 PN
 XX
 XX 01-MAY-2003.
 PD
 XX
 XX 08-OCT-2002; 2002WO-US032088.
 PF
 XX
 XX 09-OCT-2001; 2001US-0327864P.
 PR
 XX
 XX 07-DEC-2001; 2001US-00008978.
 PR
 XX
 XX (NANO-) NANOSPHERE INC.
 PA
 XX
 XX Park S, Taton TA, Mirkin CA;
 PI
 XX
 XX WPI; 2003-430409/40.
 DR
 XX
 XX Detecting nucleic acid having two portions, by providing nanoparticles
 PT having oligonucleotides attached to it, contacting nucleic acid and
 PT nanoparticles to allow hybridization, and observing detectable change.
 PT
 XX
 XX Example 18; Page 179; 467pp; English.
 PS
 XX
 XX The invention relates to a method of detecting a nucleic acid having two
 CC portions. The method involves providing nanoparticles having
 CC oligonucleotides attached to it which has a sequence complementary to
 CC sequence of two portions of nucleic acid, contacting nucleic acid and
 CC nanoparticles to allow hybridisation of oligonucleotides with two or more
 CC portions of nucleic acid and observing a detectable change brought about
 CC by hybridisation. The method and aggregate probes are useful for
 CC detecting two or more nucleic acids (from a biological source) having at
 CC least two portions such as viral RNA, bacterial or fungal DNA, a gene
 CC associated with a disease, synthetic or structurally modified natural or
 CC synthetic RNA or DNA, or a product of a polymerase chain reaction
 CC amplification. The invention is useful for preparing a nanoprobe
 CC conjugate for detecting an analyte and for detecting a nucleic acid bound
 CC to an electrode surface. It is also useful for fabrication and for
 CC separating a selected nucleic acid having two portions from other nucleic
 CC acids. The present sequence is an oligo used to illustrate the method of
 CC the invention
 XX
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 466
 ABZ59815/C
 ID ABZ59815 standard; RNA; 20 BP.
 XX
 XX ABZ59815;
 AC
 XX 01-APR-2003 (first entry)
 DT
 XX
 XX Potato gene PCR primer dt20.
 DE
 XX
 XX Potato; plant; mitochondrial carrier protein; elongation factor EF-2;
 KW transferrin binding protein; receptor-like protein kinase; helicase;
 KW non-long terminal repeat retroelement reverse transcriptase;
 KW overwatering; transgenic; reverse transcriptase; PCR; primer; ss.
 XX
 XX Synthetic.
 OS
 XX DE10114063-A1.
 PN
 XX 10-OCT-2002.
 XX

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PF 22-MAR-2001; 2001DE-01014063.
XX
XX
XX 22-MAR-2001; 2001DE-01014063.
XX
XX (MPBC-) MPB COLOGNE GMBH MOLECULAR PLANT & PROTE.
XX
XX Buelow L, Tschartnke M, Haussuehl K;
XX
XX WPI; 2003-041808/04.
XX
XX New DNA sequences from potato, useful for producing plants with altered
XX properties e.g. tolerance of flooding, also related proteins, antibodies
XX and inhibitory sequences.
XX
XX Example 1; Page 8; 26pp; German.
XX
XX The invention relates to DNA sequences (I) that encode six specific plant
XX proteins: (i) a protein (ABP60425) with mitochondrial carrier protein
XX activity (IIa); (ii) a protein (ABP60426) with transferrin binding
XX protein activity (IIB); (iii) a protein (ABP60427) with receptor-like
XX protein kinase activity (IIC); (iv) a protein (ABP60429) with non-long
XX factor BF-2 activity (IID); (v) a protein (ABP60429) with non-long
XX terminal repeat retroelement reverse transcriptase activity (IIE); or
XX (vi) a protein (ABP60430) with helicase activity (IIF). (i), also related
XX sequences, derived ribozymes and antisense sequences, expression vectors,
XX encoded proteins and antibodies against the proteins, are used to produce
XX plants with altered properties, including tolerance of overwatering. The
XX antibodies are also used for isolation of the proteins and in
XX immunosays. Also (i) or their primer or probe fragments are used to
XX screen for terminators and constitutively, aerobically or anaerobically
XX inducible plant promoters, specifically for use in potatoes and the
XX sequence that encodes (iid) is used to alter the translation profile in
XX plants. Since (i) are derived from potato, their promoters and
XX terminators provide high level transgene expression in potato, with
XX improved tissue specificity and inducibility, and can also be used to
XX control endogenous genes. The present sequence is that of a PCR primer
XX used in the first strand synthesis of cDNAs derived from Potato
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 467
ABX79181
ID ABX79181 standard; DNA; 20 BP.
XX
XX ABX79181;
XX
XX 15-APR-2003 (first entry)
XX
XX Thio-modified 20da oligonucleotide.
XX
XX Nanoparticle; ss; nucleic acid detection; viral disease; probe;
XX human immunodeficiency virus infection; hepatitis virus infection;
XX herpes virus infection; cytomegalovirus infection; forensic science;
XX Epstein-Barr virus infection; bacterial disease; gene therapy;
XX sexually transmitted disease; inherited disorder; DNA sequencing;
XX paternity testing; cell line authentication.
XX
XX Synthetic.
XX
XX US2002155462-A1.
XX
XX 24-OCT-2002.
XX
XX 12-OCT-2001; 2001US-00976577.

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XX
XX 29-JUL-1996; 96US-0031809P.
XX 21-JUL-1997; 97MO-US012783.
XX 29-JAN-1999; 99US-00240755.
XX 25-JUN-1999; 99US-00344667.
XX 26-APR-2000; 2000US-0200161P.
XX 26-JUN-2000; 2000US-00603830.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX Taton TA;
XX
XX WPI; 2003-198491/19.
XX
XX Detecting nucleic acids having at least 2 portions comprises use of
XX nanoparticles which have oligonucleotides attached to them that are
XX complementary to portions of the nucleic acid sequence.
XX
XX Example 18; Page 44; 130pp; English.
XX
XX The invention relates to detecting a nucleic acid (NA) having at least 2
XX portions, comprises providing a type of nanoparticles (NP) having
XX attached to oligonucleotides (O) (O) on each NP has a sequence
XX complementary to sequence of at least 2 portions of NA, contacting NA
XX and NP to allow hybridisation of (O) on NP with 2 or more portions of NA,
XX and observing a detectable change brought about by hybridisation of (O)
XX on NP with NA. The nanoparticle is useful for separating a selected
XX nucleic acid having at least 2 portions, from other nucleic acids, and
XX for detecting nucleic acids having at least 2 portions. The method of
XX using NP is useful for detecting any type of nucleic acids which may be
XX used for diagnosis of disease and in sequencing of nucleic acids.
XX Preferably, the method is useful for detecting nucleic acids for
XX diagnosis and/or monitoring of viral diseases (human immunodeficiency
XX virus, hepatitis virus, herpes virus, cytomegalovirus and Epstein-Barr
XX virus), bacterial diseases, sexually transmitted diseases, inherited
XX disorders, in forensics, in DNA sequencing, for paternity testing, for
XX cell line authentication and for monitoring gene therapy. The method is
XX useful in research and analytical laboratories in DNA sequencing and in
XX the field to detect the presence of specific pathogens. Detecting nucleic
XX acids based on observing a colour change with the naked eye is cheap,
XX fast, simple and robust, and do not require specialised expensive
XX equipment. The present sequence is a nanoparticle (e.g. gold particles)
XX labelled probe used to demonstrate the method of the invention
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 468
ABX92177
ID ABX92177 standard; DNA; 20 BP.
XX
XX ABX92177;
XX
XX 12-MAY-2003 (first entry)
XX
XX Nanoparticle-associated oligonucleotide SEQ ID 55.
XX
XX Nonparticle; nucleic acid detection; hybridisation; diagnosis;
XX sequencing; viral infection; human immunodeficiency virus; HIV;
XX hepatitis virus; herpes virus; cytomegalovirus; Epstein-Barr virus;
XX bacterial infection; sexually transmitted disease; inherited disorder;
XX forensic; paternity testing; cell line authentication; gene therapy; ss.
XX
XX Synthetic.
XX

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XX PN US2002155458-A1.
XX PD
XX FT 24-OCT-2002.
XX PF
XX PF 28-SEP-2001; 2001US-00967409.
XX PR
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97WO-US012783.
XX PR 29-JAN-1999; 99US-00240755.
XX PR 25-JUN-1999; 99US-00344667.
XX PR 26-APR-2000; 2000US-0200161P.
XX PR 26-JUN-2000; 2000US-00603830.
XX PA (NANO-) NANOSPHERE INC.
XX XX
XX XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX PI Taton TA;
XX XX
XX DR WPI; 2003-182627/18.
XX XX
XX PT Detecting nucleic acids having at least two portions involves use of
XX PT nanoparticles which have oligonucleotides attached to them that are
XX PT complementary to portions of the nucleic acid sequence.
XX XX
XX PS Disclosure; Page 59; 130pp; English.
XX XX
XX CC This invention describes a novel method of detecting nucleic acid having
XX CC at least two portions. The method involves providing nanoparticles
XX CC attached to oligonucleotides, where the oligonucleotide on each
XX CC nanoparticle have a sequence complementary to a sequence of at least two
XX CC portions of nucleic acid, contacting nucleic acid and nanoparticle to
XX CC allow hybridisation of the oligonucleotide on the nanoparticle with two
XX CC or more portions of nucleic acid and observing a detectable change
XX CC brought about by hybridisation of the oligonucleotide nanoparticle with
XX CC nucleic acid. The method is useful for separating a selected nucleic acid
XX CC having at least two portions, from other nucleic acids and for detecting
XX CC nucleic acids having at least two portions. The method is useful for
XX CC detecting any type of nucleic acids which may be used for diagnosis of
XX CC disease and in sequencing of nucleic acids. Preferably, the method is
XX CC useful for detecting nucleic acids for diagnosis and/or monitoring of
XX CC viral infections (human immunodeficiency virus (HIV), hepatitis virus,
XX CC herpes virus, cytomegalovirus and Epstein-Barr virus), bacterial
XX CC diseases, sexually transmitted diseases, inherited disorders, in
XX CC forensics, in DNA sequencing, for paternity testing, for cell line
XX CC authentication, and for monitoring gene therapy. The method is useful in
XX CC research and analytical laboratories in DNA sequencing, in the field to
XX CC detect the presence of specific pathogens. Detecting nucleic acids based
XX CC on observing a colour change with the naked eye is cheap, fast, simple
XX CC and robust and does not require specialised expensive equipment. ABX92123
XX CC -ABX92186 and ABQ77356 represent oligonucleotides used to illustrate the
XX CC method of the invention
XX XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAA 20
RESULT 469
ACD27255
ID ACD27255 standard; DNA; 20 BP.
XX
XX AC ACD27255;
XX
XX DT 15-OCT-2003 (first entry)
XX DE Nanotechnology nucleic acid detection method associated #54.

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XX XX Nanotechnology; ss; nucleic acid detection; nanoparticle;
XX KW virus detection; human immunodeficiency virus; HIV; hepatitis; herpes;
XX KW cytomegalovirus; Epstein-Barr virus; bacterial disease; DNA sequencing;
XX KW sexually transmitted disease; inherited disorder; forensic;
XX KW paternity testing; cell line authentication.
XX OS Synthetic.
XX XX
XX PH Key Location/Qualifiers
XX FT modified_base 1 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= Thiol modified" "
XX XX
XX PN US2002155459-A1.
XX PD
XX PD 24-OCT-2002.
XX PF
XX PF 11-OCT-2001; 2001US-00975062.
XX PR
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97WO-US012783.
XX PR 29-JAN-1999; 99US-00240755.
XX PR 25-JUN-1999; 99US-00344667.
XX PR 26-APR-2000; 2000US-0200161P.
XX PR 26-JUN-2000; 2000US-00603830.
XX XX
XX XX (NANO-) NANOSPHERE INC.
XX XX
XX XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX PI Taton TA;
XX XX
XX DR WPI; 2003-228114/22.
XX XX
XX PT Detecting nucleic acids having 2 portions e.g. for detecting disease,
XX PT comprises use of nanoparticles which have oligonucleotides attached to
XX PT them that are complementary to portions of the nucleic acid sequence.
XX XX
XX PS Example 18; Page 43; 129pp; English.
XX XX
XX CC This invention relates to a novel method for detecting a nucleic acid
XX CC having 2 portions. The method comprises providing nanoparticles having
XX CC oligonucleotides attached, where the oligonucleotide on each nanoparticle
XX CC has a sequence complementary to a sequence of 2 portions of nucleic acid.
XX CC The nucleic acid and nanoparticle are contacted to allow hybridisation of
XX CC the oligonucleotide on the nanoparticle with two or more portions of
XX CC nucleic acid and observing a detectable change brought about by the
XX CC hybridisation. The method of the invention is useful for separating a
XX CC selected nucleic acid having 2 portions, from other nucleic acids, and
XX CC for detecting nucleic acids having 2 portions. The method of the
XX CC invention is useful for detecting any type of nucleic acids which may be
XX CC used for diagnosis of disease and in sequencing of nucleic acids.
XX CC Preferably, the method is useful for detecting nucleic acids for
XX CC diagnosis and/or monitoring of viral diseases (human immunodeficiency
XX CC virus, hepatitis virus, herpes virus, cytomegalovirus and Epstein-Barr
XX CC virus), bacterial diseases, sexually transmitted diseases, inherited
XX CC disorders, in forensics, in DNA sequencing, for paternity testing, for
XX CC cell line authentication, for monitoring gene therapy, etc. This method
XX CC involves detecting nucleic acids based on observing a colour change with
XX CC the naked eye so is cheap, fast, simple and robust, and does not require
XX CC specialised expensive equipment. The present sequence represents a thiol
XX CC modified oligonucleotide sequence used to demonstrate the method of the
XX CC invention
XX XX
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2728
|||||

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```
Db      1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 470
ACD27125
ID  ACD27125 standard; DNA; 20 BP.
XX
AC  ACD27125;
XX
DT  15-OCT-2003 (first entry)
XX
DE  Nanotechnology nucleic acid detection method oligonucleotide #54.
XX
KW  Nanotechnology; nucleic acid detection; nanoparticle; ss; forensic;
KW  DNA sequencing; paternity testing; cell line authentication.
XX
OS  Synthetic.
XX
FH  Key      Location/Qualifiers
FT  modified_base 1
FT  /*tag= a
FT  /mod_base= OTHER
FT  /note= "OTHER= Thiol modified" "
XX
PN  US2002164605-A1.
XX
PD  07-NOV-2002.
XX
PF  28-SEP-2001; 2001US-00966312.
XX
PR  29-JUL-1996; 96US-0031809P.
PR  21-JUL-1997; 97WO-US012783.
PR  29-JAN-1999; 99US-00240755.
PR  25-JUN-1999; 99US-00344667.
PR  26-APR-2000; 2000US-0200161P.
PR  26-JUN-2000; 2000US-00603830.
XX
PA  (NANO-) NANOSPHERE INC.
XX
PI  Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
PI  Taton TA;
XX
DR  WPI; 2003-247253/24.
XX
PT  Detecting nucleic acid having two portions, by providing nanoparticles
PT  having oligonucleotides attached to it, contacting nucleic acid and
PT  nanoparticles to allow hybridization, and observing detectable change,
PT  useful in forensics.
XX
PS  Example 18; Page 44; 130pp; English.
XX
CC  This invention relates to a novel method for detecting nucleic acid
CC  sequences having two portions. The method involves providing
CC  nanoparticles having oligonucleotides attached to them, which has a
CC  sequence complementary to sequence of two portions of nucleic acid,
CC  contacting nucleic acid and nanoparticles, to allow hybridisation of
CC  oligonucleotides with two or more portions of nucleic acid, and observing
CC  a detectable change brought about by hybridisation. The method of the
CC  invention and the aggregate probes are useful for detecting two or more
CC  nucleic acids (from a biological source) having at least two portions,
CC  such as viral RNA or DNA, bacterial or fungal DNA, a gene associated with
CC  a disease, synthetic, or structurally- modified natural or synthetic RNA
CC  or DNA, or a product of a polymerase chain reaction amplification.
CC  Nanoparticles and nanoparticle- oligonucleotide conjugates of the
CC  invention are useful for nanofabrication, and for separating a selected
CC  nucleic acid having two portions from other nucleic acids. The method of
CC  the invention is useful in forensics, DNA sequencing, for paternity
CC  testing, cell line authentication, and monitoring gene therapy.
CC  Diagnostic assays employing the nanoparticle-oligonucleotide conjugates
CC  of the invention improve the sensitivity of the nucleic acid detection
CC  assay. The present sequence represents a thiol modified oligonucleotide
CC  sequence used to demonstrate the method of the invention
XX

SQ      Sequence 20 BP; 20 A; 0 G; 0 C; 0 T; 0 U; 0 Other;
Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      2709 AAAAAAAAAAAAAAAAAAAAAA 2728
      |||||
Db      1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 471
ACD27385
ID  ACD27385 standard; DNA; 20 BP.
XX
AC  ACD27385;
XX
DT  15-OCT-2003 (first entry)
XX
DE  Nanotechnology nucleic acid detection method associated #54.
XX
KW  Nanoparticle; ss; nucleic acid detection; DNA sequencing;
KW  pathogen detection.
XX
OS  Synthetic.
XX
FH  Key      Location/Qualifiers
FT  modified_base 1
FT  /*tag= a
FT  /mod_base= OTHER
FT  /note= "OTHER= Thiol modified" "
XX
PN  US2002182611-A1.
XX
PD  05-DEC-2002.
XX
PF  28-SEP-2001; 2001US-00966491.
XX
PR  29-JUL-1996; 96US-0031809P.
PR  21-JUL-1997; 97WO-US012783.
PR  29-JAN-1999; 99US-00240755.
PR  25-JUN-1999; 99US-00344667.
PR  26-APR-2000; 2000US-0200161P.
PR  26-JUN-2000; 2000US-00603830.
XX
PA  (NANO-) NANOSPHERE INC.
XX
PI  Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
PI  Taton TA;
XX
DR  WPI; 2003-596264/56.
XX
PT  Detection of nucleic acid for, e.g. research and analytical laboratories
PT  in deoxyribonucleic acid sequencing, involves contacting nucleic acid
PT  with nanoparticles having oligonucleotides.
XX
PS  Example 18; Page 43; 109pp; English.
XX
CC  This invention relates to a novel method for detecting a nucleic acid by
CC  contacting a nucleic acid with at least two types of nanoparticles having
CC  oligonucleotides attached, allowing hybridisation of the oligonucleotides
CC  on the nanoparticles, and observing a detectable change. The
CC  oligonucleotides on each nanoparticle have a sequence complementary to
CC  its respective portion of the sequence of the nucleic acid to be
CC  detected. The method of the invention may be used for the detection of a
CC  nucleic acid used in, e.g. research and analytical laboratories in DNA
CC  sequencing, in the field to detect the presence of specific pathogens, in
CC  prescribing a drug for treatment, and in homes and health centres for
CC  the doctor's office for quick identification of an infection to assist in
CC  nucleic acids based on screening. The method of the invention detects
CC  nucleic acids based on observing a colour change with the naked eye. This
CC  method is cheap, fast, simple, robust and does not require specialised or
CC  expensive equipment. The present sequence represents a thiol modified
```


CC oligonucleotide sequence used to demonstrate the method of the invention
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 472
 ACD27190
 ID ACD27190 standard; DNA; 20 BP.
 XX
 AC ACD27190;
 XX
 DT 15-OCT-2003 (first entry)
 XX
 DE Nanotechnology nucleic acid detection method associated #54.
 XX
 KW Nanoparticle; ss; nucleic acid detection; DNA sequencing.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= Thiol modified" "

US2002182613-A1.
 XX
 XX 05-DEC-2002.
 XX
 XX 12-OCT-2001; 2001US-00976971.
 XX
 PR 29-JUL-1996; 96US-0031809P.
 PR 21-JUL-1997; 97WO-US012783.
 PR 29-JAN-1999; 99US-00240755.
 PR 25-JUN-1999; 99US-00344667.
 PR 26-APR-2000; 2000US-0200181P.
 PR 26-JUN-2000; 2000US-00603830.
 XX
 PA (NANO-) NANOSPHERE INC.
 XX
 PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 PI Taton TA;
 XX
 DR WPI; 2003-596265/56.
 XX
 PT Detection of nucleic acid for, e.g. research and analytical laboratories
 PT in deoxyribonucleic acid sequencing, involves contacting nucleic acid
 PT with nanoparticles having oligonucleotides.
 XX
 PS Example 18; Page 43; 107pp; English.
 XX
 CC This invention relates to a novel method for detecting a nucleic acid by
 CC contacting nucleic acid with at least two types of nanoparticles having
 CC oligonucleotides, allowing hybridisation of the oligonucleotides on the
 CC nanoparticles, and observing a detectable change. The oligonucleotides on
 CC each nanoparticle have a sequence complementary to its respective portion
 CC of the sequence of the nucleic acid. The method of the invention may be
 CC used for the detection of a nucleic acid used in, e.g. research and
 CC analytical laboratories in DNA sequencing, in the field to detect the
 CC presence of specific pathogens, in the doctor's office for quick
 CC identification of an infection to assist in prescribing a drug for
 CC treatment, and in homes and health centres for inexpensive first-line
 CC screening. The inventive method of detecting nucleic acids based on
 CC observing a colour change with the naked eye are cheap, fast, simple,
 CC robust (the reagents are stable), do not require specialised or expensive

CC equipment, and little or no instrumentation is required. The present
 CC sequence represents a thiol modified oligonucleotide sequence used to
 CC demonstrate the method of the invention
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 473
 ACD27060
 ID ACD27060 standard; DNA; 20 BP.
 XX
 AC ACD27060;
 XX
 DT 15-OCT-2003 (first entry)
 XX
 DE Nanotechnology nucleic acid detection method oligonucleotide #54.
 XX
 KW Nanotechnology; nucleic acid detection; nanofabrication; nanoprobe; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= Thiol modified" "

US2003044805-A1.
 XX
 XX 06-MAR-2003.
 XX
 XX 15-OCT-2001; 2001US-00981344.
 XX
 PR 29-JUL-1996; 96US-0031809P.
 PR 21-JUL-1997; 97WO-US012783.
 PR 29-JAN-1999; 99US-00240755.
 PR 25-JUN-1999; 99US-00344667.
 PR 26-APR-2000; 2000US-0200161P.
 PR 26-JUN-2000; 2000US-00603830.
 XX
 PA (NANO-) NANOSPHERE INC.
 XX
 PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 PI Taton TA;
 XX
 DR WPI; 2003-521746/49.
 XX
 PT Detection of nucleic acid having -2 portions used to prepare biomaterials
 PT and in nanofabrication methods, comprises providing nanoparticles,
 PT contacting nucleic acid and nanoparticles, and observing change.
 XX
 PS Example 18; Page 44; 130pp; English.
 XX
 CC This invention relates to a novel method for detecting nucleic acids. The
 CC method comprises providing nanoparticles with oligonucleotides attached
 CC to them, which have a sequence complementary to a sequence of two
 CC portions of nucleic acid, contacting the nucleic acid and nanoparticles
 CC to allow hybridisation of the oligonucleotides with two or more portions
 CC of the nucleic acid, and observing a detectable change brought about by
 CC the hybridisation. The nucleic acid to be detected must have at least two
 CC portions and the distances between these are chosen so that when the
 CC nanoparticle-oligonucleotide conjugate binds the target sequence a
 CC detectable change occurs. The method of the invention is useful for
 CC detecting two or more nucleic acids (from a biological source) having at
 CC least two portions, such as viral RNA, bacterial or fungal DNA, a gene

CC associated with a disease, synthetic, or structurally- modified natural
 CC or synthetic RNA or DNA, or a product of a polymerase chain reaction
 CC amplification. Nanoparticle-oligonucleotide conjugates of the invention
 CC are useful for preparing a nanoprobe conjugate for detecting an analyte,
 CC and for detecting a nucleic acid bound to an electrode surface.
 CC Nanoparticles and nanoparticle conjugates of the invention are useful for
 CC nanofabrication and for separating a selected nucleic acid having two
 CC portions from other nucleic acids. Diagnostic assays employing
 CC nanoparticle-oligonucleotide conjugates improve the sensitivity of
 CC nucleic acid detection methods and can be used to detect nucleic acids
 CC that are present in only small amounts in a sample. The invention also
 CC provides highly desirable nanoparticle-oligonucleotide conjugates. These
 CC conjugates are stable with tailored hybridisation abilities. The present
 CC sequence represents a thiol modified oligonucleotide sequence used to
 CC demonstrate the method of the invention
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 474
 ACH00064
 ID ACH00064 standard; DNA; 20 BP.
 XX
 AC ACH00064;
 XX
 DT 15-OCT-2003 (first entry)
 XX
 DE Nanotechnology nucleic acid detection method oligonucleotide #54.
 XX
 KW Nanotechnology; nucleic acid detection; nanofabrication; nanoprobe; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= Thiol modified" "
 XX
 PN US2003049631-A1.
 XX
 PD 13-MAR-2003.
 XX
 PF 10-OCT-2001; 2001US-00974500.
 XX
 PR 29-JUL-1996; 96US-0031809P.
 PR 21-JUL-1997; 97WO-US012783.
 PR 29-JAN-1999; 99US-00240755.
 PR 25-JUN-1999; 99US-00344667.
 PR 26-APR-2000; 2000US-0200161P.
 PR 26-JUN-2000; 2000US-00603830.
 XX
 PA (NANO-) NANOSPHERE INC.
 XX
 PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
 PI Taton TA;
 XX
 DR WPI; 2003-634854/60.
 XX
 XX Detection of nucleic acid having at least two portions, by contacting
 PT nucleic acid and nanoparticles under conditions, which allows
 PT hybridization of oligonucleotides on nanoparticles with at least two
 PT portions of nucleic acid.
 XX
 PS Example 18; Page 44; 108pp; English.

XX This invention relates to a novel method for detecting nucleic acids. The
 CC method comprises providing nanoparticles with oligonucleotides attached
 CC to them, which have a sequence complementary to a sequence of two
 CC portions of nucleic acid, contacting the nucleic acid and nanoparticles
 CC to allow hybridisation of the oligonucleotides with two or more portions
 CC of the nucleic acid, and observing a detectable change brought about by
 CC the hybridisation. The nucleic acid to be detected must have at least two
 CC portions and the distances between these are chosen so that when the
 CC nanoparticle-oligonucleotide conjugate binds the target sequence a
 CC detectable change occurs. The method of the invention is useful for
 CC detecting two or more nucleic acids (from a biological source) having at
 CC least two portions, such as viral RNA, bacterial or fungal DNA, a gene
 CC associated with a disease, synthetic, or structurally- modified natural
 CC or synthetic RNA or DNA, or a product of a polymerase chain reaction
 CC amplification. Nanoparticle-oligonucleotide conjugates of the invention
 CC are useful for preparing a nanoprobe conjugate for detecting an analyte,
 CC and for detecting a nucleic acid bound to an electrode surface.
 CC Nanoparticles and nanoparticle conjugates of the invention are useful for
 CC nanofabrication and for separating a selected nucleic acid having two
 CC portions from other nucleic acids. Diagnostic assays employing
 CC nanoparticle-oligonucleotide conjugates improve the sensitivity of
 CC nucleic acid detection methods and can be used to detect nucleic acids
 CC that are present in only small amounts in a sample. The invention also
 CC provides highly desirable nanoparticle-oligonucleotide conjugates. These
 CC conjugates are stable with tailored hybridisation abilities. The present
 CC sequence represents a thiol modified oligonucleotide sequence used to
 CC demonstrate the method of the invention
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 475
 ACD99851
 ID ACD99851 standard; DNA; 20 BP.
 XX
 AC ACD99851;
 XX
 DT 25-SEP-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #537.
 XX
 KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antulcer; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX
 OS Synthetic.
 XX
 PN US2003050268-A1.
 PR 13-MAR-2003.
 PD
 PF 29-MAR-2002; 2002US-00112653.
 PR 29-MAR-2001; 2001US-0279642P.
 PR
 PA (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX
 XX Krieg AM, Berg DJ;
 PI WPI; 2003-521815/49.
 DR
 XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT

PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 XX disease by administering an immunostimulatory nucleic acid.
 PS Disclosure; Page 23; 229pp; English.
 XX

CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
 |||||

RESULT 476
 ACD99847/c
 ID ACD99847 standard; DNA; 20 BP.
 AC ACD99847;
 XX

DT 25-SEP-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #533.
 XX

KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX

OS Synthetic.
 XX

PN US2003050268-A1.
 XX

PD 13-MAR-2003.
 XX

PF 29-MAR-2002; 2002US-00112653.
 XX

PR 29-MAR-2001; 2001US-0279642P.
 XX

PA (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX

PI Krieg AM, Berg DJ;
 XX

WPI; 2003-521815/49.
 XX

Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX

PS Disclosure; Page 23; 229pp; English.
 XX

CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
 |||||

RESULT 478
 ADA14838
 ID ADA14838 standard; DNA; 20 BP.
 XX
 AC ADA14838;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
 |||||

RESULT 477
 ACD99532/c
 ID ACD99532 standard; DNA; 20 BP.
 XX
 AC ACD99532;
 XX

DT 25-SEP-2003 (first entry)
 XX
 DE Immunostimulatory nucleic acid #218.
 XX

KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX

OS Synthetic.
 XX

PN US2003050268-A1.
 XX

PD 13-MAR-2003.
 XX

PF 29-MAR-2002; 2002US-00112653.
 XX

PR 29-MAR-2001; 2001US-0279642P.
 XX

PA (KRIE/) KRIEG A M.
 PA (BERG/) BERG D J.
 XX

PI Krieg AM, Berg DJ;
 XX

WPI; 2003-521815/49.
 XX

Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX

PS Disclosure; Page 14; 229pp; English.
 XX

CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
 |||||

RESULT 478
 ADA14838
 ID ADA14838 standard; DNA; 20 BP.
 XX
 AC ADA14838;

XX 06-NOV-2003 (first entry)

XX Hairpin target sequence, #2, used in an example of the invention.

DE Hairpin sensor; hairpin loop; complementary probe; inverse repeat arm;

KW quenchable fluorescing agent; microarray; semiconductor; nanocrystal;

KW rhodamine B-labelled dye; detection; gold support; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT misc_binding 1..20

FT /*tag= a

FT /bound_moiety= "Hairpin oligonucleotide #2"

FT /note= "Forms a double-stranded region with the hairpin

FT oligonucleotide shown in examples 3, 4 and 5"

XX US2003013109-A1.

XX 16-JAN-2003.

XX 21-JUN-2002; 2002US-00176055.

XX 21-JUN-2001; 2001US-0299460P.

XX (BALL/) BALLINGER C T.

PA (LOCA/) LOCASCIO M.

PA (LAND/) LANDRY D P.

XX Ballinger CT, Locascio M, Landry DP;

XX WPI; 2003-596312/56.

XX Hairpin sensor useful for detecting a target nucleotide sequence in a

PT sample, comprises a hairpin loop assembly including a complementary probe

PT and a quenchable fluorescing agent.

XX Example 3; Page 11; 16pp; English.

XX The invention discloses a hairpin sensor comprising a hairpin loop

CC assembly including a complementary probe positioned between a first

CC inverse repeat arm and a second inverse repeat arm, and a quenchable

CC fluorescing agent joined, directly or indirectly, to the end of the

CC second inverse repeat arm of the hairpin loop assembly opposing the

CC complementary probe. Also claimed is a microarray comprising the hairpin

CC sensor, where the end of the first inverse repeat arm opposite the

CC complementary probe is bound, directly or indirectly, to a support, a kit

CC for detecting a target nucleotide sequence in a sample comprising the

CC hairpin sensor, and a support, and a hairpin sensor system, in which the

CC particle is conductive or semi-conductive, including at least one of the

CC above hairpin sensor assemblies. The hairpin sensor further comprises a

CC functional group joined to the end of the first inverse repeat arm

CC opposite the complementary probe, or first spacer opposite the first

CC inverse repeat arm, the functional group selected from amino, carboxyl,

CC thiol and hydroxyl. Further, the sensor comprises a ligand positioned

CC between the second inverse repeat arm and the quenchable fluorescing

CC agent, where the ligand is selected from mercapto, hydroxyl, amino,

CC nitrile and carboxyl, carboxylic acid, organic acid and amino acid. The

CC second spacer is positioned between the second inverse repeat arm and the

CC quenchable fluorescing agent which comprises a semiconductor nanocrystal

CC or rhodamine B-labelled dye. Within the microarray the support is capable

CC of accepting a charge. At least one hairpin sensor comprises two or more

CC hairpin sensors. The two or more hairpin sensors include complementary

CC probes that are the same or different and respective quenchable

CC fluorescing agents that are the same or different. The two or more

CC hairpin sensors are arranged in a spatially-defined pattern. The sensor

CC and system are useful for detecting a target nucleotide sequence in a

CC sample. Further, the method involves identifying the target nucleotide

CC sequence by the location of the complementary probe to which the target

CC nucleotide sequence binds. The two or more hairpin sensors include

CC complementary probes or quenchable fluorescing agents, that are

CC different. The sequence presented is the hairpin oligonucleotide target

CC sequence, #2, used in an example of the invention.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 20; DB 1; Length 20;

XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;

XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 479

ADA06159

ID ADA06159 standard; DNA; 20 BP.

XX ADA06159;

XX 06-NOV-2003 (first entry)

XX Nanoparticle labelled oligonucleotides, spacer DNA #2.

DE ss; nanoparticle; colloidal gold; semiconductor; nanomaterial;

KW nanostructure; viral disease; human immunodeficiency virus infection;

KW hepatitis virus infection; herpes virus infection;

KW cytomegalovirus virus infection; Epstein-Barr virus; bacterial disease;

KW sexually transmitted disease; inherited disorders; paternity testing;

KW cell line authentication; gene therapy.

XX Synthetic.

XX US2003068622-A1.

XX 10-APR-2003.

XX 12-OCT-2001; 2001US-00976863.

XX 29-JUL-1996; 96US-0031809P.

PR 21-JUL-1997; 97WO-US012783.

PR 29-JAN-1999; 99US-00240755.

PR 25-JUN-1999; 99US-00344667.

PR 26-APR-2000; 2000US-0200161P.

PR 26-JUN-2000; 2000US-00603830.

XX (NANO-) NANOSPHERE INC.

PA Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;

PI Taton TA;

XX WPI; 2003-576420/54.

XX Detecting nucleic acids having at least 2 portions comprises use of

PT nanoparticles which have oligonucleotides attached to them that are

PT complementary to portions of the target nucleic acid sequence.

XX Example 18; Page 44; 130pp; English.

XX The invention relates to detecting a nucleic acid (NA) having at least 2

CC portions comprising providing a type of nanoparticles (NP, e.g. colloidal

CC gold) having oligonucleotides (O) attached (where (O) on each NP has a

CC sequence complementary to sequence of at least two portions of NA),

CC contacting NA and NP to allow hybridisation of (O) on NP with 2 or more

CC portions of NA, and observing a detectable change brought about by

CC hybridization of (O) on NP with NA. Also included are aggregate probes,

CC core probes, substrate having NP attached to it, a metallic or

CC semiconductor NP having (O) attached to it, nanomaterial/nanostructures

CC comprising nanoparticles and methods of nanofabrication utilising

CC nanoparticles and satellite probes. The methods, probes nucleic acids,

CC nanoparticles and oligonucleotides are useful for separating a selected

CC nucleic acid having at least two portions, from other nucleic acids, and

CC for detecting nucleic acids having at least two portions, for detecting

CC NA having at least two portions. The method is useful for detecting any

type of nucleic acids which may be used for diagnosis of disease and in sequencing of nucleic acids. Preferably, the method is useful for detecting nucleic acids for diagnosis and/or monitoring of viral diseases (human immunodeficiency virus, hepatitis virus, herpes virus, cytomegalovirus and Epstein-Barr virus). Bacterial diseases, sexually transmitted diseases, inherited disorders, in forensics, in DNA sequencing, for paternity testing, for cell line authentication, for monitoring, gene therapy, etc. The method is useful in research and analytical laboratories in DNA sequencing, in the field to detect the presence of specific pathogens, etc. Detecting nucleic acids based on observing a colour change with the naked eye is cheap, fast, simple and robust, and do not require specialised expensive equipment. The present sequence is a spacer oligonucleotide used to illustrate the method of the invention.

Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 480

ACD26995
ID ACD26995 standard; DNA; 20 BP.

AC ACD26995;

DT 15-OCT-2003 (first entry)

DE Nanotechnology nucleic acid detection method oligonucleotide #54.

DE Nanotechnology; nucleic acid detection; nanofabrication; nanoprobe; ss.

OS Synthetic.

Key Location/Qualifiers

modified_base 1 /*tag= a

FT /mod_base= OTHER

FT /note= "OTHER= Thiol modified" "

PN US2003049630-A1.

PD 13-MAR-2003.

PP 20-SEP-2001; 2001US-00957318.

PR 29-JUL-1996; 96US-0031809P.

PR 21-JUL-1997; 97WO-US012783.

PR 23-JAN-1999; 99US-00240755.

PR 25-JUN-1999; 99US-00344667.

PR 26-APR-2000; 2000US-0200161P.

PR 26-JUN-2000; 2000US-00603830.

PA (NANO-) NANOSPHERE INC.

PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;

PI Taton TA;

DR WPI; 2003-615795/58.

XX Detecting nucleic acid having two portions, by providing nanoparticles having oligonucleotides attached to it, contacting nucleic acid and nanoparticles to allow hybridization, and observing detectable change.

PS Example 18; Page 43; 129pp; English.

XX This invention relates to a novel method for detecting nucleic acids. The

method comprises providing nanoparticles with oligonucleotides attached to them, which have a sequence complementary to a sequence of two portions of nucleic acid, contacting the nucleic acid and nanoparticles to allow hybridisation of the oligonucleotides with two or more portions of the nucleic acid, and observing a detectable change brought about by the hybridisation. The nucleic acid to be detected must have at least two portions and the distances between these are chosen so that when the nanoparticle-oligonucleotide conjugate binds the target sequence a detectable change occurs. The method of the invention is useful for detecting two or more nucleic acids (from a biological source) having at least two portions, such as viral RNA, bacterial or fungal DNA, a gene or synthetic RNA or DNA, or a product of a polymerase chain reaction amplification. Nanoparticle-oligonucleotide conjugates of the invention are useful for preparing a nanoprobe conjugate for detecting an analyte, and for detecting a nucleic acid bound to an electrode surface. Nanoparticles and nanoparticle conjugates of the invention are useful for nanofabrication and for separating a selected nucleic acid having two portions from other nucleic acids. Diagnostic assays employing nanoparticle-oligonucleotide conjugates improve the sensitivity of nucleic acid detection methods and can be used to detect nucleic acids that are present in only small amounts in a sample. The present sequence represents a thiol modified oligonucleotide sequence used to demonstrate the method of the invention

Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 481

ADB36933

ID ADB36933 standard; DNA; 20 BP.

AC ADB36933;

DT 04-DEC-2003 (first entry)

DE Immunostimulatory nucleic acid #547.

DE ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
hypo-responsive subject; immunostimulatory.

OS Synthetic.

PN US2003087848-A1.

PD 08-MAY-2003.

PP 02-FEB-2001; 2001US-00776479.

PR 03-FEB-2000; 2000US-0179991P.

PA (BRAT/) BRATZLER R L.

PA (PETE/) PETERSEN D M.

PA (FOUR/) FOURON Y.

PI Bratzler RL, Petersen DM, Fouron Y;

XX WPI; 2003-657977/62.

XX Treating and/or preventing allergy or asthma using an immunostimulatory nucleic acid alone or in combination with an asthma/allergy medicament.

PS Disclosure; Page 13; 221pp; English.

XX The invention relates to a method of treating or preventing allergy or

```

CC asthma which comprises administering to a subject a poly-G nucleic acid
CC in an aerosol formulation. The methods and compositions of the present
CC invention are useful for diagnosing and/or treating asthma and allergy
CC especially in a hypo-responsive subject. The present sequence represents
CC an immunostimulatory nucleic acid of the invention.
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 482
ADB36601/c
ID ID ADB36601 standard; DNA; 20 BP.
XX AC
XX ADB36601;
XX DT 04-DEC-2003 (first entry)
XX DE Immunostimulatory nucleic acid #215.
XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX OS Synthetic.
XX US2003087848-A1.
XX PN
XX PD 08-MAY-2003.
XX PF 02-FEB-2001; 2001US-00776479.
XX PR 03-FEB-2000; 2000US-0179991P.
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX PI Bratzler RL, Petersen DM, Fouron Y;
XX WPI; 2003-657977/62.
XX Treating and/or preventing allergy or asthma using an immunostimulatory
XX nucleic acid alone or in combination with an asthma/allergy medicament.
XX Disclosure; Page 8; 221pp; English.
XX The invention relates to a method of treating or preventing allergy or
XX asthma which comprises administering to a subject a poly-G nucleic acid
XX in an aerosol formulation. The methods and compositions of the present
XX invention are useful for diagnosing and/or treating asthma and allergy
XX especially in a hypo-responsive subject. The present sequence represents
XX an immunostimulatory nucleic acid of the invention.
XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 483
ADB36929/c
ID ID ADB36929 standard; DNA; 20 BP.
XX AC
XX ADB36929;
XX DT 04-DEC-2003 (first entry)
XX DE Immunostimulatory nucleic acid #543.
XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX KW hypo-responsive subject; immunostimulatory.
XX OS Synthetic.
XX US2003087848-A1.
XX PN
XX PD 08-MAY-2003.
XX PF 02-FEB-2001; 2001US-00776479.
XX PR 03-FEB-2000; 2000US-0179991P.
XX PA (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX PI Bratzler RL, Petersen DM, Fouron Y;
XX WPI; 2003-657977/62.
XX Treating and/or preventing allergy or asthma using an immunostimulatory
XX nucleic acid alone or in combination with an asthma/allergy medicament.
XX Disclosure; Page 13; 221pp; English.
XX The invention relates to a method of treating or preventing allergy or
XX asthma which comprises administering to a subject a poly-G nucleic acid
XX in an aerosol formulation. The methods and compositions of the present
XX invention are useful for diagnosing and/or treating asthma and allergy
XX especially in a hypo-responsive subject. The present sequence represents
XX an immunostimulatory nucleic acid of the invention.
XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 484
ADC24378
ID ID ADC24378 standard; DNA; 20 BP.
XX AC
XX ADC24378;
XX DT 18-DEC-2003 (first entry)
XX DE PCR primer for amplifying the ATP dependant DNA helicase gene #SEQ ID 68.
XX DNA amplification; copy number; polymerase chain reaction; PCR; primer;
XX ss.
XX Synthetic.
XX JP2002345466-A.
XX PN
XX PD 03-DEC-2002.
XX PF 08-MAY-2001; 2001JP-00137858.
XX

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PR 08-MAY-2001; 2001JP-00137858.
XX (TAKA-) TAKARA BIO KK.
PA (KOKU-) KOKURITSU GAN CENT SOCHO.
PA (IYAK-) IYAKUHIN FUKUSAYO HIGAI KYUSAI KENKYU SH.
XX
DR WPI; 2003-460878/44.
XX
CC Amplification of DNA maintaining genes and copy number of the sequence on
PT a genome, and their ratios in the resultant DNA fragment.
XX
PS Example 5; SEQ ID NO 68; 33pp; Japanese.
XX
CC The invention relates to a method for the amplification of DNA that
CC maintains genes and copy number of the sequence. This method is useful
CC for easy and operable amplification of DNA. The method was carried out by
CC fragmentation genomic DNA, preparation of blunt end of the fragmented
CC DNA, ligation of an adapter to the bluntend DNA, PCR of the ligated DNA in
CC 2 steps, and confirmation of the amplified APC gene. The current sequence
CC represents a PCR primer used in an example from the invention.
XX
SQ Sequence 20 BP; 1 A; 10 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1745 CCCTCCCTGTCGTGTTACCC 1764
Db 1 CCCTCCCTGTCGTGTTACCC 20
RESULT 485
ADE52461/c
ID ADE52461 standard; DNA; 20 BP.
XX
AC ADE52461;
XX
DT 29-JAN-2004 (first entry)
XX
DE Stem cell factor (SCF) related DNA #32.
XX
KW Stem cell factor; SCF; haematopoietic activity; infertility;
KW intestinal damage; myeloproliferative disorder; leucopenia;
KW thrombocytopenia; anaemia; bone marrow transplant; immune deficiency;
KW neoplasia; nerve damage; osteoporosis; metastatic carcinoma; leukaemia;
KW myliary tuberculosis; haematopoietic progenitor cell; ss.
XX
OS Synthetic.
XX
XX US2002031491-A1.
XX
XX 14-MAR-2002.
XX
XX 31-DEC-1998; 98US-00224683.
XX
PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449653.
PR 12-JAN-1998; 98US-00005893.
XX
PA (ZSEB/) ZSEB K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
PI Zeebo KM, Bosseelman RA, Suggs SV, Martin FH;
XX

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DR WPI; 2003-851459/79.
XX
XX New non-natural stem cell factor, useful for treating e.g. leucopenia or
XX immune deficiency, also related nucleic acid and antibodies.
XX
PS Disclosure; SEQ ID NO 33; 217pp; English.
XX
CC The invention relates to stem cell factor (SCF) polypeptides with
CC haematopoietic activity and the polynucleotides encoding them. The
CC polypeptides are used for treating infertility, intestinal damage,
CC myeloproliferative disorders, leucopenia, thrombocytopenia or anaemia,
CC for improving engraftment of bone marrow transplants, for enhancing bone
CC marrow recovery after radiotherapy or chemotherapy and in treatment of
CC immune deficiency, neoplasia, nerve damage, osteoporosis, metastatic
CC carcinoma, leukaemia and myliary tuberculosis. The SCF polypeptides are
CC also used to expand haematopoietic progenitor cells for transplantation
CC and to prepare such cells for transfection with a gene. The SCF
CC polynucleotides can be used for recombinant expression of the
CC polypeptides and also as probes for mapping of the SCF gene, for
CC identifying SCF-related diseases and as a marker for neighbouring genes.
CC Antibodies raised against the polypeptides are useful in diagnosis and to
CC remove SCF from blood. This sequence represents SCF related DNA of the
CC invention.
XX
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
Db 20 CTAATAAAAAAAAAAAAAAAAAA 1
RESULT 486
ADF09421
ID ADF09421 standard; DNA; 20 BP.
XX
AC ADF09421;
XX
DT 12-FEB-2004 (first entry)
XX
DE Linking oligonucleotide #55.
XX
KW Linking oligonucleotide; ss; nucleic acid detection;
KW nanoparticle-oligonucleotide conjugate.
XX
OS Synthetic.
XX
XX US2003148282-A1.
XX
XX 07-AUG-2003.
XX
XX 12-OCT-2001; 2001US-00976968.
XX
PR 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 25-JUN-1999; 99US-00344667.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
XX
PA (NANO-) NANOSPHERE INC.
XX
PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
PI Taton TA;
XX
XX WPI; 2003-897536/B2.
XX
PT Detection of nucleic acid having at least two portions comprises
PT contacting the nucleic acid and nanoparticles under conditions to allow
PT hybridization of the oligonucleotides, and observing detectable change

```

```

PT brought by hybridization.
XX
PS Example 18; SEQ ID NO 55; 129pp; English.
XX
CC The invention relates to a method of detecting a nucleic acid with at
CC least two portions by providing a type of nanoparticle-oligonucleotide
CC conjugate, contacting the nucleic acid and nanoparticles to allow
CC hybridization of the oligonucleotides with the two or more portions of
CC the nucleic acid and observing a detectable change brought about by
CC hybridisation. The oligonucleotides have a sequence complementary to the
CC sequence of at least two portions of the nucleic acid. Hybridisation of
CC the oligonucleotides on the nanoparticles with the nucleic acid results
CC in a detectable change. This sequence represents a linking
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 487
ADF65655
ID ADF65655 standard; DNA; 20 BP.
XX
AC ADF65655;
XX
XX 12-FEB-2004 (first entry)
XX
DE Nanotechnology nucleic acid detection method associated #54.
XX
XX Linking oligonucleotide; ss; nucleic acid detection;
KW nanoparticle-oligonucleotide conjugate.
XX
OS Synthetic.
XX
XX US2002146720-A1.
XX
XX 10-OCT-2002.
XX
XX 20-SEP-2001; 2001US-00961949.
XX
XX 29-JUL-1996; 96US-0031809P.
XX
XX 21-JUL-1997; 97WO-US012783.
XX
XX 23-JAN-1999; 99US-00240755.
XX
XX 25-JUN-1999; 99US-00344667.
XX
XX 26-APR-2000; 2000US-0200161P.
XX
XX 26-JUN-2000; 2000US-00603830.
XX
PA (NANO-) NANOSPHERE INC.
XX
PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JU, Elghanian R;
PI Taton TA;
XX
XX WPI; 2003-174167/17.
XX
XX Detecting nucleic acid having two portions, by providing nanoparticles
XX having oligonucleotides attached to it, contacting nucleic acid and
XX nanoparticles to allow hybridization, and observing detectable change.
XX
PS Example 18; SEQ ID NO 55; 130pp; English.
XX
CC The invention relates to a method of detecting a nucleic acid with at
CC least two portions by providing a type of nanoparticle-oligonucleotide
CC conjugate, contacting the nucleic acid and nanoparticles to allow
CC hybridisation of the oligonucleotides with the two or more portions of
CC the nucleic acid and observing a detectable change brought about by
CC hybridisation. The oligonucleotides have a sequence complementary to the
CC sequence of at least two portions of the nucleic acid. Hybridisation of
CC the oligonucleotides on the nanoparticles with the nucleic acid results
CC in a detectable change. This sequence represents a linking
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 488
AAD64709
ID AAD64709 standard; DNA; 20 BP.
XX
XX AAD64709;
XX
XX 12-FEB-2004 (first entry)
XX
DE Coadsorbed diluent thiol modified oligonucleotide.
XX
XX Nanoparticle; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
FH modified_base 1
FT /tag= a
FT /mod_base= OTHER
FT /note= "Labelled with thiol group"
XX
XX US2003180783-A1.
XX
XX 25-SEP-2003.
XX
XX 09-APR-2003; 2003US-00410324.
XX
XX 29-JUL-1996; 96US-0031809P.
XX
XX 21-JUL-1997; 97WO-US012783.
XX
XX 23-JAN-1999; 99US-00240755.
XX
XX 25-JUN-1999; 99US-00344667.
XX
XX 26-JUN-2000; 2000US-00603830.
XX
XX 20-SEP-2001; 2001US-00961949.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JU, Elghanian R;
XX Taton TA;
XX
XX WPI; 2003-863931/80.
XX
XX Detection of nucleic acid with two portions comprises providing
XX nanoparticles having oligonucleotides, contacting nucleic acid and
XX nanoparticles to allow hybridization of oligonucleotides on
XX nanoparticles, and observing detectable change.
XX
PS Example 18; SEQ ID NO 55; Opp; English.
XX
CC The present invention relates to methods of detecting nucleic acids
XX whether natural or synthetic and whether modified or unmodified. The
XX invention also relates to materials for detecting nucleic acids and to
XX methods of separating a selected nucleic acid from other nucleic acids.
XX The invention is useful for detecting nucleic acid having at least 2
XX portions. The present sequence is an oligonucleotide used to synthesise
XX and purify fluorescein labelled oligonucleotides
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

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Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 489

ADF65590
 ID ADF65590 standard; DNA; 20 BP.

AC ADF65590;

DT 12-FEB-2004 (first entry)

DE Nanotechnology nucleic acid detection method associated #54.

KW Linking oligonucleotide; ss; nucleic acid detection;

KW nanoparticle-oligonucleotide conjugate.

XX Synthetic.

PN US2003124528-A1.

XX 03-JUL-2003.

PF 12-OCT-2001; 2001US-00976601.

PR 29-JUL-1996; 96US-0031809P.

PR 21-JUL-1997; 97WO-US012783.

PR 29-JAN-1999; 99US-00240755.

PR 25-JUN-1999; 99US-00344667.

PR 26-APR-2000; 2000US-0200161P.

PR 26-JUN-2000; 2000US-00603830.

XX (NANO-) NANOSPHERE INC.

PA Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;

PI Taton TA;

XX WPI; 2003-810979/76.

XX Detection of nucleic acid useful for, e.g. research and analytical
 PT laboratories in deoxyribonucleic acid sequencing, comprises contacting
 PT nucleic acid with at least two types of nanoparticles attached with
 PT oligonucleotides.

PS Example 18; SEQ ID NO 55; 130pp; English.

XX The invention relates to a method of detecting a nucleic acid with at
 CC least two portions by providing a type of nanoparticle-oligonucleotide
 CC conjugate, contacting the nucleic acid and nanoparticles to allow
 CC hybridisation of the oligonucleotides with the two or more portions of
 CC the nucleic acid and observing a detectable change brought about by
 CC hybridisation. The oligonucleotides have a sequence complementary to the
 CC sequence of at least two portions of the nucleic acid. Hybridisation of
 CC the oligonucleotides on the nanoparticles with the nucleic acid results
 CC in a detectable change. This sequence represents a linking
 CC oligonucleotide of the invention.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 490

ADH59608/c

ID ADH59608 standard; DNA; 20 BP.

XX ADH59608;

DT 25-MAR-2004 (first entry)

XX Non-nucleotide probe of the invention #12.

XX non-nucleotide probe; Bacterial Artificial Chromosome clone; BAC; ss;

XX Synthetic.

PN WO2003027328-A2.

PD 03-APR-2003.

PF 24-SEP-2002; 2002WO-US030573.

PR 24-SEP-2001; 2001US-0324499P.

XX (BOST-) BOSTON PROBES INC.

PA (DAKO-) DAKOCYTOMATION DENMARK AS.

PI Kirtsen NV, Hyldeg-Nielsen JJ, Williams BF;

DR WPI; 2003-421160/39.

XX Non-nucleotide probe for suppressing binding of detectable nucleic acid
 PT probes to undesired sequences, has aggregate nucleobase sequence
 PT homologous to randomly distributed repeat sequence of genomic nucleic
 PT acid.

PS Claim 10; SEQ ID NO 14; 103pp; English.

XX The present sequence represents a non-nucleotide probe. The probe is
 CC useful for suppressing the binding of one or more detectable nucleic acid
 CC probes, that are greater than 100 base pairs and that have been derived
 CC from genomic nucleic acid, to one or more undesired sequences in an assay
 CC for determining target genomic nucleic acid of a sample. The method
 CC comprises contacting the sample with the mixture of probes (preferably
 CC comprising 5-50 probes), contacting the sample with the one or more
 CC detectable nucleic acid probes, and determining the hybridization of the
 CC nucleic acid of the sample by determining the hybridization of the one or
 CC more detectable nucleic acid probes to the target genomic nucleic acid of
 CC the sample. The genomic nucleic acid is contained in a fixed tissue or a
 CC cell, and the sample is metaphase spreads, interphase nucleic or nucleic
 CC found in paraffin embedded tissue material or frozen tissue sections. The
 CC probe is also useful in comparing a sample of genomic nucleic acid with
 CC that of a control sample using a genomic nucleic acid reference array.
 CC The method comprises treating a sample of genomic nucleic acid and
 CC control genomic nucleic acid, which are differentially labelled, the
 CC array or both the sample and control genomic nucleic acid and the array
 CC with the mixture of the probe under suitable hybridization conditions,
 CC contacting the array with treated mixture of sample and control genomic
 CC nucleic acid under suitable hybridization conditions, and comparing the
 CC intensities of the signals from the differential labels of the array to
 CC that caused by hybridization of the probes to genomic nucleic acid, thus
 CC determining one or more variations in copy numbers of sequences in the
 CC sample as compared with the relative copy numbers of substantially
 CC identical sequences in the control. The hybridization of the genomic
 CC array is determined using an intercalating dye or a detectable antibody,
 CC or its fragment, that is specific for a nucleic acid/nucleic acid hybrid.
 CC The sample of genomic nucleic acid to be tested and the reference of
 CC nucleic acid are labelled with detectable moiety such that hybridization
 CC of the genomic array is determined by determining the presence, absence,
 CC amount or location of the detectable label on the one or more genomic
 CC arrays. The genomic array comprises nucleic acid that is prepared from
 CC Bacterial Artificial Chromosome (BAC) clones. The present sequence
 CC represents a non-nucleotide probe of the invention.

XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 |||||
 DB 20 AAAAAAAAAAAAAAAAAA 1

RESULT 491
 ADH59620
 ID ADH59620 standard; DNA; 20 BP.
 XX
 AC ADH59620;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Non-nucleotide probe of the invention #24.
 XX
 KW non-nucleotide probe; Bacterial Artificial Chromosome clone; BAC; ss;
 KW probe.
 XX
 OS Synthetic.
 XX
 PN WO2003027328-A2.
 XX
 PD 03-APR-2003.
 XX
 PF 24-SEP-2002; 2002WO-US030573.
 XX
 PR 24-SEP-2001; 2001US-0324499P.
 XX
 PA (BOST-) BOSTON PROBES INC.
 PA (DAKO-) DAKOCYTOMATION DENMARK AS.
 XX
 PI Kirteen NV, Hyldig-Nielsen JJ, Williams BF;
 XX
 DR WPI; 2003-421160/39.
 XX
 XX
 PT Non-nucleotide probe for suppressing binding of detectable nucleic acid
 PT probes to undesired sequences, has aggregate nucleobase sequence
 PT homologous to randomly distributed repeat sequence of genomic nucleic
 PT acid.
 XX
 PS Claim 10; SEQ ID NO 26; 103pp; English.
 XX
 CC The present sequence represents a non-nucleotide probe. The probe is
 CC useful for suppressing the binding of one or more detectable nucleic acid
 CC probes, that are greater than 100 base pairs and that have been derived
 CC from genomic nucleic acid, to one or more undesired sequences in an assay
 CC for determining target genomic nucleic acid of a sample. The method
 CC comprises contacting the sample with the mixture of probes (preferably
 CC comprising 5-50 probes), contacting the sample with the one or more
 CC detectable nucleic acid probes, and determining the target genomic
 CC nucleic acid of the sample by determining the hybridization of the one or
 CC more detectable nucleic acid probes to the target genomic nucleic acid of
 CC the sample. The genomic nucleic acid is contained in a fixed tissue or a
 CC cell, and the sample is metaphase spreads, interphase nucleic or nucleic
 CC found in paraffin embedded tissue material or frozen tissue sections. The
 CC probe is also useful in comparing a sample of genomic nucleic acid with
 CC that of a control sample using a genomic nucleic acid reference array.
 CC The method comprises treating a sample of genomic nucleic acid and
 CC control genomic nucleic acid, which are differentially labelled, the
 CC array or both the sample and control genomic nucleic acid and the array
 CC with the mixture of the probe under suitable hybridization conditions,
 CC contacting the array with treated mixture of sample and control genomic
 CC nucleic acid under suitable hybridization conditions, and comparing the
 CC intensities of the signals from the differential labels of the array to
 CC that caused by hybridization of the probes to genomic nucleic acid, thus
 CC determining one or more variations in copy numbers of sequences in the
 CC sample as compared with the relative copy numbers of substantially

CC identical sequences in the control. The hybridization of the genomic
 CC array is determined using an intercalating dye or a detectable antibody,
 CC or its fragment, that is specific for a nucleic acid/nucleic acid hybrid.
 CC The sample of genomic nucleic acid to be tested and the reference of
 CC nucleic acid are labelled with detectable moiety such that hybridization
 CC of the genomic array is determined by determining the presence, absence,
 CC amount or location of the detectable label on the one or more genomic
 CC arrays. The genomic array comprises nucleic acid that is prepared from
 CC Bacterial Artificial Chromosome (BAC) clones. The present sequence
 CC represents a non-nucleotide probe of the invention.
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02; Indels 0; Gaps 0;
 Matches 20; Conservative 0; Mismatches 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728

|||||
 DB 1 AAAAAAAAAAAAAAAAAA 20

RESULT 492

ABZ88267

ID ABZ88267 standard; DNA; 20 BP.

XX
 AC ABZ88267;

XX
 DT 17-OCT-2003 (first entry)

XX
 DE Human oligonucleotide sequence.

XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX
 OS Homo sapiens.

XX
 PN WO200285308-A2.

XX
 PD 31-OCT-2002.

XX
 PF 23-APR-2002; 2002WO-US013135.

XX
 PR 24-APR-2001; 2001US-0286137P.

XX
 PA (EPTG-) EPIGENESIS PHARM INC.

XX
 PI Nyce JW, Li Y, Sandraesgra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX
 DR WPI; 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX
 PS Disclosure; SEQ ID NO 3509; 872pp; English.

XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 493

ABZ88565
 ID ABZ88565 standard; DNA; 20 BP.

AC ABZ88565;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 3807; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 494

ABZ88619

ID ABZ88619 standard; DNA; 20 BP.

XX AC ABZ88619;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 3861; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 495

ABZ89705

ID ABZ89705 standard; DNA; 20 BP.

XX

AC ABZ89705;

XX

DT 17-OCT-2003 (first entry)

XX

DE Human oligonucleotide sequence.

XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytotstatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS

XX WO200285308-A2.

PN

XX 31-OCT-2002.

PD

XX 23-APR-2002; 2002WO-US013135.

PF

XX 24-APR-2001; 2001US-0286137P.

PR

XX (EPIG-) EPIGENESIS PHARM INC.

PA

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

PI

XX WPI; 2003-229219/22.

DR

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4947; 872pp; English.

PS

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, immunosuppressive, hypotensive,
 CC immunosuppressive, and cytotstatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 496

ABZ88816

ID ABZ88816 standard; DNA; 20 BP.

XX

AC ABZ88816;

XX

DT 17-OCT-2003 (first entry)

XX

DE Human oligonucleotide sequence.

XX

KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytotstatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

OS

XX WO200285308-A2.

PN

XX 31-OCT-2002.

PD

XX 23-APR-2002; 2002WO-US013135.

PF

XX 24-APR-2001; 2001US-0286137P.

PR

XX (EPIG-) EPIGENESIS PHARM INC.

PA

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

PI

XX WPI; 2003-229219/22.

DR

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4058; 872pp; English.

PS

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, immunosuppressive, hypotensive,
 CC immunosuppressive, and cytotstatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 497

ABZ88881
 ID ABZ88881 standard; DNA; 20 BP.

XX
 AC ABZ88881;

XX
 DT 17-OCT-2003 (first entry)

XX
 DE Human oligonucleotide sequence.

XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX
 OS Homo sapiens.

XX
 PN WO200285308-A2.

XX
 PD 31-OCT-2002.

XX
 PF 23-APR-2002; 2002WO-US013135.

XX
 PR 24-APR-2001; 2001US-0286137P.

XX
 PA (EPIG-) EPIGENESIS PHARM INC.

XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX
 DR WPI; 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX
 PS Disclosure; SEQ ID NO 4123; 872pp; English.

XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
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 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 498

ABZ89706
 ID ABZ89706 standard; DNA; 20 BP.

XX
 AC ABZ89706;

XX
 DT 17-OCT-2003 (first entry)

XX
 DE Human oligonucleotide sequence.

XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX
 OS Homo sapiens.

XX
 PN WO200285308-A2.

XX
 PD 31-OCT-2002.

XX
 PF 23-APR-2002; 2002WO-US013135.

XX
 PR 24-APR-2001; 2001US-0286137P.

XX
 PA (EPIG-) EPIGENESIS PHARM INC.

XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX
 DR WPI; 2003-229219/22.

XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX
 PS Disclosure; SEQ ID NO 4948; 872pp; English.

XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 499
ABZ88620
ID ABZ88620 standard; DNA; 20 BP.
XX
AC ABZ88620;
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX

PS Disclosure; SEQ ID NO 3862; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 500
ABZ88880
ID ABZ88880 standard; DNA; 20 BP.
XX
AC ABZ88880;
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX

PS Disclosure; SEQ ID NO 4122; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 19 A; 0 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 1 TAAAAAAAAAAAAAAAAAAAAA 20

RESULT 501

ABZ89179

ID ABZ89179 standard; DNA; 20 BP.

XX AC ABZ89179;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX XX 31-OCT-2002.

XX XX 23-APR-2002; 2002WO-US013135.

XX XX 24-APR-2001; 2001US-0286137P.

XX XX (EPIG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4421; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 19 A; 0 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 1 TAAAAAAAAAAAAAAAAAAAAA 20

RESULT 502

ABZ88814

ID ABZ88814 standard; DNA; 20 BP.

XX AC ABZ88814;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX XX 31-OCT-2002.

XX XX 23-APR-2002; 2002WO-US013135.

XX XX 24-APR-2001; 2001US-0286137P.

XX XX (EPIG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4056; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 503
ABZ9241
ID ABZ9241 standard; DNA; 20 BP.
XX
AC ABZ9241;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX Disclosure; SEQ ID NO 4483; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 504
ABZ90650
ID ABZ90650 standard; DNA; 20 BP.
XX
AC ABZ90650;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX Disclosure; SEQ ID NO 5892; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 505
 ABZ88815
 ID ABZ88815 standard; DNA; 20 BP.
 XX AC ABZ88815;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX

PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

PS Disclosure; SEQ ID NO 4057; 872pp; English.
 XX
 XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a polypeptide associated with lung and/or
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 506
 ABZ85311/c
 ID ABZ85311 standard; DNA; 20 BP.
 XX AC ABZ85311;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX

PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

PS Claim 15; SEQ ID NO 553; 872pp; English.
 XX
 XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 ||||||||||||||||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 507
 ABZ85435/C
 ID ABZ85435 standard; DNA; 20 BP.

XX
 AC ABZ85435;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; db.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Claim 15; SEQ ID NO 677; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 ||||||||||||||||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 508
 ABZ88817

ID ABZ88817 standard; DNA; 20 BP.

XX
 AC ABZ88817;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; db.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4059; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 509

ABZ88939

ID ABZ88939 standard; DNA; 20 BP.

XX AC ABZ88939;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4181; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 510

ABZ89302

ID ABZ89302 standard; DNA; 20 BP.

XX AC ABZ89302;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4544; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction.
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 511
ABZ88566
ID ABZ88566 standard; DNA; 20 BP.

XX AC ABZ88566;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EP1G-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX Disclosure; SEQ ID NO 3808; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction.
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 512
ABZ89086
ID ABZ89086 standard; DNA; 20 BP.

XX AC ABZ89086;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.

XX Disclosure; SEQ ID NO 4328; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 513

ABZ85533
 ID ABZ85533 standard; DNA; 20 BP.

XX AC ABZ85533;

XX XX 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX XX WO200285308-A2.

XX XX 31-OCT-2002.

XX XX 23-APR-2002; 2002WO-US013135.

XX XX 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX PS Claim 15; SEQ ID NO 775; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 514

ABZ89015

ID ABZ89015 standard; DNA; 20 BP.

XX AC ABZ89015;

XX XX 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX XX WO200285308-A2.

XX XX 31-OCT-2002.

XX XX 23-APR-2002; 2002WO-US013135.

XX XX 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX PS Disclosure; SEQ ID NO 4257; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 515
 ABZ89240
 ID ABZ89240 standard; DNA; 20 BP.

XX
 AC ABZ89240;

XX
 DT 17-OCT-2003 (first entry)

XX
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4482; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 18 A; 1 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
 Db 1 CTAATAAAAAAAAAAAAAAAAAA 20

RESULT 516
 ABZ89441

ID ABZ89441 standard; DNA; 20 BP.

XX
 AC ABZ89441;

XX
 DT 17-OCT-2003 (first entry)

XX
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4683; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, anti-allergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 517
 ABZ89016
 ID ABZ89016 standard; DNA; 20 BP.

XX AC ABZ89016;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX PS Disclosure; SEQ ID NO 4258; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 518

ABZ89120

ID ABZ89120 standard; DNA; 20 BP.

XX AC ABZ89120;

XX DT 17-OCT-2003 (first entry)

XX DE Human oligonucleotide sequence.

XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX OS Homo sapiens.

XX PN WO200285308-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013135.

XX PR 24-APR-2001; 2001US-0286137P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-229219/22.

XX PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX PS Disclosure; SEQ ID NO 4362; 872pp; English.

XX CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 519
 ABZ89704
 ID ABZ89704 standard; DNA; 20 BP.

XX
 AC ABZ89704;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4946; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 520
 ACD27320

ID ACD27320 standard; DNA; 20 BP.

XX
 AC ACD27320;

DT 15-OCT-2003 (first entry)

DE Nanotechnology nucleic acid detection method associated #54.

XX Nanotechnology; ss; nucleic acid detection; nanoparticle;
 KW virus detection; human immunodeficiency virus; HIV; hepatitis; herpes;
 KW cytomegalovirus; Epstein-Barr virus; bacterial disease; DNA sequencing;
 KW sexually transmitted disease; inherited disorder; forensic;
 KW paternity testing; cell line authentication.

XX Synthetic.

XX Key Location/Qualifiers
 FH modified_base 1
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= Thiol modified" "

XX US2002155461-A1.

XX 24-OCT-2002.

XX 12-OCT-2001; 2001US-00976378.

XX 29-JUL-1996; 96US-0031809P.

PR 21-JUL-1997; 97WO-US012783.

PR 29-JAN-1999; 99US-00240755.

PR 25-JUN-1999; 99US-00344667.

PR 26-APR-2000; 2000US-0200161P.

PR 26-JUN-2000; 2000US-00603830.

XX (NANO-) NANOSPHERE INC.

XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghamian R;

PI Taton TA;

XX WPI; 2003-228115/22.

XX Detecting nucleic acids having 2 portions e.g. for detecting disease,
 PT comprises use of nanoparticles which have oligonucleotides attached to
 PT them that are complementary to portions of the nucleic acid sequence.
 XX Example 18; Page 44; 130pp; English.

XX This invention relates to a novel method for detecting a nucleic acid

CC having 2 portions. The method comprises providing nanoparticles having
 CC oligonucleotides attached, where the oligonucleotide on each nanoparticle
 CC has a sequence complementary to a sequence of 2 portions of nucleic acid.
 CC The nucleic acid and nanoparticle are contacted to allow hybridisation of
 CC the oligonucleotide on the nanoparticle with two or more portions of
 CC nucleic acid and observing a detectable change brought about by the
 CC hybridisation. The method of the invention is useful for separating a
 CC selected nucleic acid having 2 portions, from other nucleic acids, and
 CC for detecting nucleic acids having 2 portions. The method of the
 CC invention is useful for detecting any type of nucleic acids which may be
 CC used for diagnosis of disease and in sequencing of nucleic acids for
 CC preferably, the method is useful for detecting nucleic acids for
 CC diagnosis and/or monitoring of viral diseases (human immunodeficiency
 CC virus, hepatitis virus, herpes virus, cytomegalovirus and Epstein-Barr
 CC virus), bacterial diseases, sexually transmitted diseases, inherited
 CC disorders, in forensics, in DNA sequencing, for paternity testing, for
 CC cell line authentication, for monitoring gene therapy, etc. This method
 CC involves detecting nucleic acids based on observing a colour change with
 CC the naked eye so is cheap, fast, simple and robust, and does not require
 CC specialised expensive equipment. The present sequence represents a thiol
 CC modified oligonucleotide sequence used to demonstrate the method of the
 CC invention

XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 521
 ACC58867/c
 ID ACC58867 standard; DNA; 20 BP.
 AC ACC58867;
 XX
 XX 08-SEP-2003' (first entry)
 DT Doubly labelled DNA probe.
 DE
 XX Probe; nucleic acid detection; ss.
 KW Synthetic.
 OS
 XX WO2003043402-A2.
 PN
 PD 30-MAY-2003.
 XX
 XX 21-OCT-2002; 2002WO-US033699.
 PF
 XX 19-OCT-2001; 2001US-0336432P.
 PR
 XX (PROL-) PROLIGO LLC.
 PA
 XX Bruce I, Davies M, Wolter A;
 PI
 XX WPI; 2003-505122/47.
 DR

XX Detection or quantification of nucleic acid analyte, by hybridizing a
 CC nucleic acid probe having non-identical covalently attached dyes, with
 CC nucleic acid analyte, and measuring change in fluorescence of the probes.
 PT
 XX Example 9; Page 32; 110pp; English.

XX The present sequence is an example of nucleic acid probes of the
 CC invention. The probe may be doubly labelled with non-identical covalently
 CC attached dyes, e.g. the fluorescent intercalator ethidium, which serves
 CC as the detector dye and the fluorescent dye fluorescein, which serves as
 CC the donor dye of a fluorescent resonance energy transfer (FRET) system. A

CC bifunctional linker was used to attach the dyes to the oligonucleotide.
 CC The probe generates a fluorescent signal upon hybridisation to a
 CC complementary nucleic acid based on the interaction of the intercalator
 CC with the formed double-stranded DNA. Nucleic acid probes of the invention
 CC can be used in homogeneous assays, real-time PCR monitoring,
 CC transcription assays, expression analysis on nucleic acid microarrays and
 CC other microarray applications such as genotyping

XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 522
 ABZ22916/c
 ID ABZ22916 standard; DNA; 20 BP.
 AC ABZ22916;
 XX
 XX 08-APR-2003 (first entry)
 DT Phosphorothioate 20-mer oligonucleotide #1.
 DE
 XX Chiral; phosphorothioate; oligonucleotide synthesis; enantiomer; ss.
 KW Synthetic.
 OS
 XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages"
 XX
 XX WO2002102815-A2.
 PN
 PD 27-DEC-2002.
 XX
 XX 13-JUN-2002; 2002WO-US018581.
 PF
 XX 14-JUN-2001; 2001US-00881535.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Ravikumar VT;
 PI
 XX WPI; 2003-157021/15.
 DR

XX Preparing internucleotide phosphorothioate linkage enhanced in Sp/Rp
 CC enantiomer, by coupling a synthon with 2'-substituted nucleoside in
 CC presence of coupling agent having a pKa that enhances linkage in Sp/Rp
 CC enantiomer.
 PT
 XX Example 1; Page 31; 65pp; English.

XX The present invention describes a method (M1) for preparing an
 CC internucleotide phosphorothioate linkage enriched in the Sp or Rp
 CC enantiomer between a synthon having a hydroxyl moiety at the 5' position
 CC and a 2'-substituted nucleoside having an activated phosphate moiety at
 CC the 3'-position, comprising coupling a synthon with a 2'-substituted
 CC nucleoside in the presence of coupling agent that is selected to enhance
 CC either the Rp or Sp enantiomer according to its pKa. This method is
 CC useful for preparing an oligonucleotide having at least one region of
 CC internucleotide linkages that is enhanced in the Sp or Rp enantiomer,
 CC which involves providing a nucleotide having a hydroxyl moiety at the 5'-
 CC position or a growing oligonucleotide chain having a hydroxyl moiety at
 CC the 5'-position, coupling the nucleotide or growing oligonucleotide chain
 CC to a 2'-substituted nucleoside having an activated phosphate moiety at

CC the 3' position in the presence of the coupling agent, and repeating the
 CC coupling step until the desired number of linkages is established. The
 CC oligonucleotide having a region of internucleotide linkages that is
 CC enhanced in the Sp enantiomer is further processed to include another
 CC region of internucleotide linkages that is enhanced in the Sp and/or Rp
 CC enantiomer. Oligonucleotides prepared by the method lead to improved
 CC drugs, diagnostics and research reagents. The present sequence represents
 CC an oligonucleotide used in the exemplification of the present invention
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 523
 ABD24497
 ID ABD24497 standard; DNA; 20 BP.

AC ABD24497;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE A1652901-derived oligonucleotide SEQ ID 3509.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.
 XX WO200285309-A2.
 XX 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013143.
 XX 24-APR-2001; 2001US-0286036P.
 XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 3509; 763pp; English.
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, cystic fibrosis, allergic rhinitis, pulmonary
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer.
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 524
 ABD25047

ID ABD25047 standard; DNA; 20 BP.

AC ABD25047;

XX 29-JUL-2004 (first entry)

XX A1128305-derived oligonucleotide SEQ ID 4059.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

PS Claim 15; SEQ ID NO 4059; 763pp; English.

XX This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating

CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The

CC oligonucleotides are derived from a gene encoding or regulating

CC expression of a target polypeptide associated with lung airway or lung

CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery

CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,

CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered

CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The

CC pulmonary obstruction, and/or surfactant hypoproduction are associated

CC with a disease or condition such as pulmonary vasoconstriction,

CC inflammation, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC hyperinflation, emphysema, chronic obstructive pulmonary disease, pulmonary

CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to

CC thymidines present in the target RNA serves to prevent the breakdown of

CC the oligonucleotides into products that free adenosine into the system

CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

CC prevent any unwanted effects due to it

XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 525

ABD25316

ID ABD25316 standard; DNA; 20 BP.

AC ABD25316;

XX

DT 29-JUL-2004 (first entry)

XX

DE AI092429-derived oligonucleotide SEQ ID 4328.

XX

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;

XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;

XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;

XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

XX pulmonary transplantation rejection; ss; primer.

XX

OS Homo sapiens.

XX

XX W0200285309-A2.

PN

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013143.

XX

XX 24-APR-2001; 2001US-0286036P.

PR

XX

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX

DR WPI; 2003-093058/08.

XX

PT Pharmaceutical composition for treating asthma, has antisense

PT oligonucleotide containing less percentage of adenosine, targeted to

PT nucleic acids associated with lung airway or lung dysfunction, and

PT bronchodilating agent.

XX

PS Claim 15; SEQ ID NO 4328; 763pp; English.

XX

CC This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating

CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The

CC oligonucleotides are derived from a gene encoding or regulating

CC expression of a target polypeptide associated with lung airway or lung

CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery

CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,

CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered

CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The

CC pulmonary obstruction, and/or surfactant hypoproduction are associated

CC with a disease or condition such as pulmonary vasoconstriction,

CC inflammation, allergies, asthma, impeded respiration, respiratory

CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC hyperinflation, emphysema, chronic obstructive pulmonary disease, pulmonary

CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to

CC thymidines present in the target RNA serves to prevent the breakdown of

CC the oligonucleotides into products that free adenosine into the system

CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to

CC prevent any unwanted effects due to it

XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 526

ABD21763

ID ABD21763 standard; DNA; 20 BP.

XX

AC ABD21763;

XX

DT 29-JUL-2004 (first entry)

XX

DE Human stanniocalcin-derived oligo SEQ ID 775.

XX

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;

XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;

XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;

XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

XX pulmonary transplantation rejection; ss; primer.

XX

OS Homo sapiens.

XX

XX W0200285309-A2.

PN

XX

PD 31-OCT-2002.

XX

PF 23-APR-2002; 2002WO-US013143.

XX

XX 24-APR-2001; 2001US-0286036P.

PR

XX

XX

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KW pulmonary transplantation rejection; ss; primer.
XX Homo sapiens.
XX WO200285309-A2.
XX 31-OCT-2002.
XX 23-APR-2002; 2002WO-US011143.
XX 24-APR-2001; 2001US-0286036P.
XX (EPIC-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 775; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
XX | | | | | | | | | | | | | | | | | |
XX Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
XX
XX RESULT 527
XX ABD25246
XX ID ABD25246 standard; DNA; 20 BP.
XX
XX AC ABD25246;

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```

XX 29-JUL-2004 (first entry)
XX AI051839-derived oligonucleotide SEQ ID 4258.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX WO200285309-A2.
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US011143.
XX 24-APR-2001; 2001US-0286036P.
XX (EPIC-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4258; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;

```

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAA 20

RESULT 528
 ID ABD24849 standard; DNA; 20 BP.
 AC ABD24849;
 XX
 XX 29-JUL-2004 (first entry)
 XX
 XX AI092623-derived oligonucleotide SEQ ID 3861.
 XX
 KW Human; antiseize; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 XX WO200285309-A2.
 XX
 XX 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 XX Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antiseize
 XX oligonucleotide containing less percentage of adenosine, targeted to
 XX nucleic acids associated with lung airway or lung dysfunction, and
 XX bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 3861; 763pp; English.
 XX
 XX This invention describes a novel composition (a) a first active agent,
 XX comprising oligonucleotides, effective for alleviating
 XX bronchoconstriction, respiratory tract inflammation, allergies and
 XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 XX surfactant depletion or hyposecretion, when administered to a mammal. The
 XX oligonucleotides are derived from a gene encoding or regulating
 XX expression of a target polypeptide associated with lung airway or lung
 XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 XX The invention also describes a kit, that comprises: (a) a delivery
 XX device, in separate containers, (b) the oligonucleotides, (c)
 XX instructions for adding a carrier and for use of the kit. The composition
 XX of the invention has antiallergic, antiinflammatory, antiasthmatic,
 XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 XX beta-adrenergic agonist. The composition is useful for preventing or
 XX treating a respiratory, lung or malignant disease. The administered
 XX composition comprises oligo and is administered to reduce the production
 XX or availability, or to increase the degradation of the target mRNA or to
 XX reduce the amount of target polypeptide present in the lungs. The
 XX pulmonary obstruction, and/or bronchoconstriction and/or lung
 XX inflammation, allergies and/or surfactant hypoproduction are associated
 XX with a disease or condition such as pulmonary vasoconstriction,
 XX inflammation, allergies, asthma, impeded respiration, respiratory
 XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system,
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. NO. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAA 20

RESULT 529
 ID ABD25470 standard; DNA; 20 BP.
 AC ABD25470;
 XX
 XX 29-JUL-2004 (first entry)
 XX
 XX AI041212-derived oligonucleotide SEQ ID 4482.
 XX
 KW Human; antiseize; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 XX WO200285309-A2.
 XX
 XX 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 XX Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antiseize
 XX oligonucleotide containing less percentage of adenosine, targeted to
 XX nucleic acids associated with lung airway or lung dysfunction, and
 XX bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 4482; 763pp; English.
 XX
 XX This invention describes a novel composition (a) a first active agent,
 XX comprising oligonucleotides, effective for alleviating
 XX bronchoconstriction, respiratory tract inflammation, allergies and
 XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 XX surfactant depletion or hyposecretion, when administered to a mammal. The
 XX oligonucleotides are derived from a gene encoding or regulating
 XX expression of a target polypeptide associated with lung airway or lung
 XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 XX The invention also describes a kit, that comprises: (a) a delivery
 XX device, in separate containers, (b) the oligonucleotides, (c)
 XX instructions for adding a carrier and for use of the kit. The composition
 XX of the invention has antiallergic, antiinflammatory, antiasthmatic,
 XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 XX beta-adrenergic agonist. The composition is useful for preventing or
 XX treating a respiratory, lung or malignant disease. The administered
 XX composition comprises oligo and is administered to reduce the production
 XX or availability, or to increase the degradation of the target mRNA or to
 XX reduce the amount of target polypeptide present in the lungs. The
 XX pulmonary obstruction, and/or bronchoconstriction and/or lung
 XX inflammation, allergies and/or surfactant hypoproduction are associated
 XX with a disease or condition such as pulmonary vasoconstriction,
 XX inflammation, allergies, asthma, impeded respiration, respiratory
 XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytosstatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 CC Sequence 20 BP; 18 A; 1 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2707 CTAAGAAAAA 2726
 DB 1 CTAAGAAAAA 20

RESULT 530
 ABD21665/c
 ID ABD21665 standard; DNA; 20 BP.
 AC ABD21665;
 XX
 XX 29-JUL-2004 (first entry)
 XX Human stannocalcin-derived oligo SEQ ID 677.
 XX
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytosstatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 XX Homo sapiens.
 XX WO200285309-A2.
 XX
 XX 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasaga A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 677; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytosstatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 CC Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAA 2728
 DB 20 AAAAAA 1

RESULT 531
 ABD24796
 ID ABD24796 standard; DNA; 20 BP.
 XX ABD24796;
 AC
 XX 29-JUL-2004 (first entry)
 DT
 DE A112689-derived oligonucleotide SEQ ID 3808.
 XX
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytosstatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 XX Homo sapiens.
 XX WO200285309-A2.
 XX
 XX 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.

```

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 3808; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 532
ABD25045
XX ABD25045 standard; DNA; 20 BP.
XX
XX ABD25045;
XX
XX 29-JUL-2004 (first entry)
XX
XX A1128305-derived oligonucleotide SEQ ID 4057.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.

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XX Homo sapiens.
XX OS
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4057; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 533
ABD25350
XX ABD25350 standard; DNA; 20 BP.
XX
XX ABD25350;
XX

```



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DT 29-JUL-2004 (first entry)
XX
DE AI096522-derived oligonucleotide SEQ ID 4362.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PF Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 4362; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.78; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 534
 ABD25245
 ID ABD25245 standard; DNA; 20 BP.
 XX
 AC ABD25245;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE AI051839-derived oligonucleotide SEQ ID 4257.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PF Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

Claim 15; SEQ ID NO 4257; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, allergic rhinitis, pulmonary
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary

CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 AC ABD25409;
 XX
 AC ABD25409;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE A122807-derived oligonucleotide SEQ ID 4421.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cyclostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 4421; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,

CC analgesic, hypotensive, immunosuppressive and cyclostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 XX Sequence 20 BP; 19 A; 0 C; 0 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAA AAAAAAAAAAAAAA 2727
 DB 1 TAAAAA AAAAAAAAAAAAAA 20
 RESULT 536
 ABD25169
 ID ABD25169 standard; DNA; 20 BP.
 XX
 AC ABD25169;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE A1041482-derived oligonucleotide SEQ ID 4181.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cyclostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 4181; 763pp; English.

CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, cancer,
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
CC
CC Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
|||||

RESULT 537
ABD25471
ID ABD25471 standard; DNA; 20 BP.
AC ABD25471;
XX
XX 29-JUL-2004 (first entry)
XX
XX A1041212-derived oligonucleotide SEQ ID 4483.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
DR WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4483; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, cancer,
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
|||||

RESULT 538
ABD24795
ID ABD24795 standard; DNA; 20 BP.
XX
XX ABD24795;
XX
XX 29-JUL-2004 (first entry)
XX
XX A1122689-derived oligonucleotide SEQ ID 3807.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX

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OS Homo sapiens.
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 3807; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
XX
RESULT 539
ABD25110
ID ABD25110 standard; DNA; 20 BP.
XX
XX ABD25110;
AC
XX
XX 29-JUL-2004 (first entry)

```

```

XX
XX
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4122; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 19 A; 0 C; 0 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

OY 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
 DB 1 TAAAAAAAAAAAAAAAAAAAAA 20

RESULT 540
 ABD25934
 ID ABD25934 standard; DNA; 20 BP.
 XX
 AC ABD25934;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE AA505075-derived oligonucleotide SEQ ID 4946.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 4946; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 541
 ABD25935
 ID ABD25935 standard; DNA; 20 BP.
 XX
 AC ABD25935;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE AA505075-derived oligonucleotide SEQ ID 4947.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 4947; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC of availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 542
 ABD25936
 ID ABD25936 standard; DNA; 20 BP.
 AC ABD25936;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE AAS05075-derived oligonucleotide SEQ ID 4948.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cycostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 4948; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,

CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 543
 ABD21541/c
 ID ABD21541 standard; DNA; 20 BP.
 AC ABD21541;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE S100 calcium binding protein A2-derived oligo SEQ ID 553.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cycostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

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PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 553; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 544
ABD25671
ID ABD25671 standard; DNA; 20 BP.
XX
XX ABD25671;
XX
XX 29-JUL-2004 (first entry)
XX
XX A1024215-derived oligonucleotide SEQ ID 4683.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
OS

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XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4683; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 545
ABD26880
ID ABD26880 standard; DNA; 20 BP.
XX
XX ABD26880;
XX
XX 29-JUL-2004 (first entry)
XX
XX

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DE AA278764-derived oligonucleotide SEQ ID 5892.

XX Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX Homo sapiens.
 OS
 XX WO200285309-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 DR
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 5892; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC the thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 546
 ABD24850
 ID ABD24850 standard; DNA; 20 BP.
 XX
 AC ABD24850;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE A1092623-derived oligonucleotide SEQ ID 3862.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX Homo sapiens.
 OS
 XX WO200285309-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 DR
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 3862; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic, is a
 CC analgesic, hypotensive, immunosuppressive and cyostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC the thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX

CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 547
 ABD25532
 ID ABD25532 standard; DNA; 20 BP.
 XX
 AC ABD25532;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE A1125651-derived oligonucleotide SEQ ID 4544.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.

XX
 XX
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX
 XX
 XX
 PS Claim 15; SEQ ID NO 4544; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 548
 ABD25046
 ID ABD25046 standard; DNA; 20 BP.
 XX
 AC ABD25046;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE A1128305-derived oligonucleotide SEQ ID 4058.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.
 XX
 PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.

XX
 XX
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 4058; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating

CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 549
ABD25044
ID ABD25044 standard; DNA; 20 BP.
AC ABD25044;
XX
XX 29-JUL-2004 (first entry)
XX
XX A1128305-derived oligonucleotide SEQ ID 4056.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cystostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
OS
XX
XX WO200285309-A2.
PN
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
PF
XX
XX 24-APR-2001; 2001US-0286036P.
PR
XX
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX
XX Nycce JW, Li Y, Sandrasegra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4056; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX pulmonary obstruction, and/or bronchoconstriction and/or lung
XX inflammation, allergies and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 550
ABD25111
ID ABD25111 standard; DNA; 20 BP.
XX
XX ABD25111;
AC
XX
XX 29-JUL-2004 (first entry)
DT
XX
XX A1125228-derived oligonucleotide SEQ ID 4123.
DE
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX

PN WO200285309-A2.
 XX 31-OCT-2002.
 XX 23-APR-2002; 2002WO-US013143.
 XX 24-APR-2001; 2001US-0286036P.
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahbuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 4123; 763pp; English.
 XX
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. NO. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 551
 AD220571/C
 ID AD220571 standard; DNA; 20 BP.
 XX
 XX AD220571;
 XX
 XX 16-JUN-2005 (first entry)
 DT
 XX Gene expression detection related oligo, SEQ ID 3.
 DE

XX DNA amplification; DNA detection; gene expression; ss.
 KW Synthetic.
 OS JP2003274975-A.
 XX 30-SEP-2003.
 PD 22-MAR-2002; 2002JP-00124983.
 XX 22-MAR-2002; 2002JP-00124983.
 XX (TOYM) TOYOBO KK.
 PA WPI; 2003-869441/81.
 DR
 XX Amplifying a nucleic acid comprises synthesizing a DNA fragment with
 PT first and second consensus sequences and performing PCR.
 PT
 XX Example 7; SEQ ID NO 3; 15pp; Japanese.
 PS
 XX The invention relates to a novel method for amplifying a nucleic acid.
 CC The method involves: synthesizing a DNA fragment having a first consensus
 CC sequence, which is not contained in the 5' terminal of the nucleic acid;
 CC adding a homopolymer to the 3' end using a terminal deoxynucleotide
 CC transferase; synthesizing a DNA fragment having a second consensus
 CC sequence at both ends using primers complementary to the homopolymer; and
 CC performing PCR using the first and second primers. The invention further
 CC comprises: a method for preparing a labeled nucleic acid, which involves
 CC the steps of the novel method above in which the PCR is performed using a
 CC label or primers; a nucleic acid detection system containing labeled
 CC nucleic acid, nucleic acid probe and immobilized solid-phase support body
 CC ; a gene-expression monitoring system, comprising a solid-phase support,
 CC a nucleic acid probe and labeled nucleic acid; a kit for amplifying
 CC nucleic acids, comprising terminal deoxynucleotidyl transferase, a
 CC selected deoxynucleotide, DNA polymerase, first and second consensus
 CC sequence and a first and second primer having partially the same sequence
 CC as the first and second consensus sequences; and a kit for labeling
 CC nucleic acids, comprising the components of the kit and labeled
 CC nucleotides. This polynucleotide sequence represents an oligonucleotide
 CC used in the method for detecting nucleic acids expressed in a sample of
 CC the invention.
 XX
 XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. NO. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 552
 ADH08684
 ID ADH08684 standard; DNA; 20 BP.
 XX
 XX ADH08684;
 XX
 XX 11-MAR-2004 (first entry)
 DT
 XX Nanotechnology nucleic acid detection method associated #54.
 DE
 XX Linking oligonucleotide; ss; nucleic acid detection;
 KW nanoparticle-oligonucleotide conjugate.
 XX
 XX Synthetic.
 OS
 XX US2002137070-A1.
 PN
 XX 26-SEP-2002.
 PD

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XX PF 10-OCT-2001; 2001US-00973638.
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97WO-US012783.
XX PR 29-JAN-1999; 99US-00240755.
XX PR 25-JUN-1999; 99US-00344667.
XX PR 26-APR-2000; 2000US-0200161P.
XX PR 26-JUN-2000; 2000US-00603830.
XX PA (NANO-) NANOSPHERE INC.
XX PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX PI Taton TA;
XX DR WPI; 2004-059018/06.
XX PT Detecting nucleic acid used for e.g. diagnosis of diseases, forensics and
XX PT DNA sequencing, comprises observing detectable change caused by
XX PT hybridization of nucleic acid with substrate or particle bound
XX PT oligonucleotides.
XX PS Example 18; SEQ ID NO 55; 130pp; English.
XX CC The invention relates to a method of detecting a nucleic acid with at
XX CC least two portions by providing a type of nanoparticle-oligonucleotide
XX CC conjugate, contacting the nucleic acid and nanoparticles to allow
XX CC hybridisation of the oligonucleotides with the two or more portions of
XX CC the nucleic acid and observing a detectable change brought about by
XX CC hybridisation. The oligonucleotides have a sequence complementary to the
XX CC sequence of at least two portions of the nucleic acid. Hybridisation of
XX CC the oligonucleotides on the nanoparticles with the nucleic acid results
XX CC in a detectable change. This sequence represents a linking
XX CC oligonucleotide of the invention.
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db | | | | | | | | | | | | | | | | | |
1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 553
ADH08814
ID ADH08814 standard; DNA; 20 BP.
XX AC ADH08814;
XX DT 11-MAR-2004 (first entry)
XX DE Nanotechnology nucleic acid detection method associated #54.
XX KW Linking oligonucleotide; ss; nucleic acid detection;
XX KW nanoparticle-oligonucleotide conjugate.
XX OS Synthetic.
XX PN US2002137072-A1.
XX PD 26-SEP-2002.
XX PF 12-OCT-2001; 2001US-00976617.
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97WO-US012783.
XX PR 29-JAN-1999; 99US-00240755.
XX PR 25-JUN-1999; 99US-00344667.
XX PR 26-APR-2000; 2000US-0200161P.
XX PR 26-JUN-2000; 2000US-00603830.

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XX PF 10-OCT-2001; 2001US-00973638.
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97WO-US012783.
XX PR 29-JAN-1999; 99US-00240755.
XX PR 25-JUN-1999; 99US-00344667.
XX PR 26-APR-2000; 2000US-0200161P.
XX PR 26-JUN-2000; 2000US-00603830.
XX PA (NANO-) NANOSPHERE INC.
XX PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX PI Taton TA;
XX DR WPI; 2004-059020/06.
XX PT Detecting nucleic acid used for e.g. diagnosis of diseases, forensics and
XX PT DNA sequencing, comprises observing detectable change caused by
XX PT hybridization of nucleic acid with substrate or particle bound
XX PT oligonucleotides.
XX PS Example 18; SEQ ID NO 55; 130pp; English.
XX CC The invention relates to a method of detecting a nucleic acid with at
XX CC least two portions by providing a type of nanoparticle-oligonucleotide
XX CC conjugate, contacting the nucleic acid and nanoparticles to allow
XX CC hybridisation of the oligonucleotides with the two or more portions of
XX CC the nucleic acid and observing a detectable change brought about by
XX CC hybridisation. The oligonucleotides have a sequence complementary to the
XX CC sequence of at least two portions of the nucleic acid. Hybridisation of
XX CC the oligonucleotides on the nanoparticles with the nucleic acid results
XX CC in a detectable change. This sequence represents a linking
XX CC oligonucleotide of the invention.
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.9e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db | | | | | | | | | | | | | | | | | |
1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 554
ADH08749
ID ADH08749 standard; DNA; 20 BP.
XX AC ADH08749;
XX DT 11-MAR-2004 (first entry)
XX DE Nanotechnology nucleic acid detection method associated #54.
XX KW Linking oligonucleotide; ss; nucleic acid detection;
XX KW nanoparticle-oligonucleotide conjugate.
XX OS Synthetic.
XX PN US2002137071-A1.
XX PD 26-SEP-2002.
XX PF 10-OCT-2001; 2001US-00974007.
XX PR 29-JUL-1996; 96US-0031809P.
XX PR 21-JUL-1997; 97WO-US012783.
XX PR 29-JAN-1999; 99US-00240755.
XX PR 25-JUN-1999; 99US-00344667.
XX PR 26-APR-2000; 2000US-0200161P.
XX PR 26-JUN-2000; 2000US-00603830.
XX PA (NANO-) NANOSPHERE INC.
XX PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
XX PI Taton TA;
XX DR WPI; 2004-059019/06.
XX PT Detecting nucleic acid used for e.g. diagnosis of diseases, forensics and

```

PT DNA sequencing, comprises observing detectable change caused by
PT hybridization of nucleic acid with substrate or particle bound
XX oligonucleotides.

XX Example 18; SEQ ID NO 55; 130pp; English.

CC The invention relates to a method of detecting a nucleic acid with at
CC least two portions by providing a type of nanoparticle-oligonucleotide
CC conjugate, contacting the nucleic acid and nanoparticles to allow
CC hybridization of the oligonucleotides with the two or more portions of
CC the nucleic acid and observing a detectable change brought about by
CC hybridisation. The oligonucleotides have a sequence complementary to the
CC sequence of at least two portions of the nucleic acid. Hybridisation of
CC the oligonucleotides on the nanoparticles with the nucleic acid results
CC in a detectable change. This sequence represents a linking
CC oligonucleotide of the invention.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAA 20

RESULT 555

ID ADI34492 standard; DNA; 20 BP.

XX AC ADI34492;

XX 22-APR-2004 (first entry)

DE Nucleotide sequence of a da20 oligonucleotide.

XX Nucleic acid amplification; RNA transcription; RNA polymerase; ss; T7.

XX Synthetic.

XX WO2003102243-A1.

XX 11-DEC-2003.

XX 30-MAY-2003; 2003WO-US017103.

XX 31-MAY-2002; 2002US-0384454P.

XX (JANC) JANSSEN PHARM NV.

XX Kamme FC, Zhu JY;

XX WPI; 2004-035466/03.

XX Amplifying for RNA in a sample, useful for improving RNA polymerase based
PT RNA transcription from a polynucleotide template, comprises eliminating
PT single-stranded oligonucleotide from the transcription sample.

PS Example 2; SEQ ID NO 11; 26pp; English.

XX The invention relates to amplifying for RNA in a sample comprises
CC eliminating single-stranded oligonucleotide from the transcription
CC sample. The method involves synthesizing single-stranded cDNA by
CC incubating the sample RNA with reverse transcriptase and an
CC oligonucleotide primer that primes synthesis in a direction toward 5' end
CC of the RNA; converting the single-stranded cDNA into double-stranded cDNA
CC to form a transcription sample containing a cDNA template; eliminating
CC single-stranded oligonucleotide from the transcription sample; and
CC transcribing the cDNA template into RNA using an RNA polymerase. The
CC method is useful for improving RNA polymerase based RNA transcription
CC from a polynucleotide template. The method inhibits the undesired non-

CC template derived production of RNA in the transcription reaction. The
CC present sequence represents an oligonucleotide used to exemplify RNA
CC transcription in the presence of single- and double-stranded
CC oligonucleotides.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAA 20

RESULT 556

ID ADI47212 standard; DNA; 20 BP.

XX AC ADI47212;

XX 22-APR-2004 (first entry)

DE Molecule analysing microchannel method related probe #2.

XX laminar flow; micro channel; complex; selectively promoted; fluorescence;
KW probe; ss.

XX Unidentified.

XX WO2004010140-A1.

XX 29-JAN-2004.

XX 18-JUL-2003; 2003WO-JP009142.

XX 19-JUL-2002; 2002JP-00211462.

XX (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.

XX Yamashita K, Maeda H, Shimizu H, Miyazaki M, Nakamura H;

PI Yamaguchi Y;

XX WPI; 2004-180318/17.

XX Analysis of sample molecules such as DNA fragment, by using micro channel
PT to form laminar flow of specimen molecule-containing solution and complex
PT forming molecule containing solution.

PS Example 1; Page 9; 19pp; Japanese.

XX The invention relates to a novel method involving forming a laminar flow,
CC by passing into a micro channel, a solution containing the specimen
CC molecules, and a solution containing probe molecules capable of forming a
CC complex with the specimen molecules. The dispersion of the formed complex
CC is selectively promoted, based on their affinity, and the degree of
CC dispersion of the complex formed between the specimen molecules and the
CC probe molecules is detected and analysed. The probe molecules are capable
CC of producing fluorescence. This polynucleotide sequence represents an
CC oligo used in the exemplification of the invention.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAA 20

RESULT 557
ADJ51142/C
ID ADJ51142 standard; DNA; 20 BP.
XX AC
XX AC
XX ADJ51142;
XX DT
XX 06-MAY-2004 (first entry)
XX Polyalkyleneamine-conjugated oligonucleotide #1.
XX DE
XX ss; Antimicrobial; Antiinflammatory; Cytostatic; prodrug; infection;
XX inflammation; tumour.
XX KW
XX KW
XX OS
XX Synthetic.
XX FH
XX Key modified_base Location/Qualifiers
XX FT 20
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Optionally conjugated with spermine,
XX polyethylenimine (PEI) 600 or PEI 1200,
XX tetraethylenepentamine. Also optionally 5'-protected with
XX DMT."
XX FT
XX FT
XX FT
XX FT
XX PN
XX US2004019000-A1.
XX PD
XX 29-JAN-2004.
XX 19-JUL-2002; 2002US-00199585.
XX 19-JUL-2002; 2002US-00199585.
XX (MANO/) MANOHARAN M.
XX PA (GUZA/) GUZAEV A P.
XX PA (MAIE/) MAIER M A.
XX PI Manoharan M, Guzaev AP, Maier MA;
XX DR
XX WPI; 2004-224429/21.
XX Novel polyalkyleneamine-containing oligomeric compound useful for
XX preventing or delaying infection, inflammation or tumor formation in
XX organisms.
XX Example 3; Page 22; 37pp; English.
XX The invention relates to a polyalkyleneamine-containing oligomeric
XX compound (OC). Also described is a compound (C) comprising an oligomeric
XX part, a fusogenic part, and a targeting part; and enhancing the cellular
XX uptake of OC, by conjugating OC to a fusogenic part. In (C), the
XX fusogenic part is covalently linked to the oligomeric part. The targeting
XX part is covalently linked to the oligomeric or fusogenic part, where the
XX fusogenic part is a lipophilic polyamine, polyethylenimine,
XX polyallylamine, fusogenic peptide, oligomeric imidazole, histidine,
XX pyridine, hydroxylamine, substituted hydroxylamine, hydrazine,
XX that binds to a cellular reporter, where the targeting part is
XX transferrin, folate, epidermal growth factor, nerve growth factor,
XX insulin, alpha-fetoprotein, galactose, galactosamine, lactose, mannose, a
XX polyclonal antibody, monoclonal antibody, peptide comprising an arginine-
XX cholesterol, low-density lipoprotein, peptide comprising an arginine-
XX glycine-aspartic acid sequence. The oligomeric part is an
XX oligonucleotide, and oligonucleotide analogue, a peptide nucleic acid or
XX a peptide nucleic acid analogue. OC is useful as a prodrug, useful in
XX diagnostics, therapeutics and as research reagents and kits. OC is useful
XX for preventing or delaying infection, inflammation or tumour formation in
XX organisms. The present sequence represents an oligonucleotide used in the
XX method of the invention.
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 558
ADI32920
ID ADI32920 standard; DNA; 20 BP.
XX AC
XX AC
XX ADI32920;
XX DT
XX 06-MAY-2004 (first entry)
XX Oligo related to thiol oligo-gold colloid conjugate probe SEQ 70.
XX nanoparticle; gold; disease; forensic; paternity testing;
XX cell line authentication; gene therapy; ss; gold colloid conjugate.
XX OS
XX Synthetic.
XX US2003207296-A1.
XX PN
XX 06-NOV-2003.
XX 08-OCT-2002; 2002US-00266983.
XX 29-JUL-1996; 96US-0031809P.
XX 21-JUL-1997; 97WO-US012783.
XX 29-JAN-1999; 99US-00240755.
XX 25-JUN-1999; 99US-00344667.
XX 13-JAN-2000; 2000US-0176409P.
XX 28-MAR-2000; 2000US-0192699P.
XX 26-APR-2000; 2000US-0200161P.
XX 26-JUN-2000; 2000US-00603830.
XX 26-JUN-2000; 2000US-0213906P.
XX 11-AUG-2000; 2000US-0224631P.
XX 08-DEC-2000; 2000US-0254392P.
XX 08-DEC-2000; 2000US-0254418P.
XX 11-DEC-2000; 2000US-0255235P.
XX 11-DEC-2000; 2000US-0255236P.
XX 12-JAN-2001; 2001US-00760500.
XX 28-MAR-2001; 2001US-00820279.
XX 09-APR-2001; 2001US-0282640P.
XX 10-AUG-2001; 2001US-00927777.
XX 09-OCT-2001; 2001US-0327864P.
XX 07-DEC-2001; 2001US-00008978.
XX (PARK/) PARK S.
XX (TATO/) TATON T A.
XX (MIRK/) MIRKIN C A.
XX Park S, Taton TA, Mirkin CA;
XX WPI; 2004-059754/06.
XX Detection of nucleic acid, e.g. viral RNA or DNA, comprises contacting
XX nucleic acid with different types of nanoparticles having attached
XX oligonucleotides and observing detectable change brought about by
XX hybridization.
XX Example 24; SEQ ID NO 70; 206pp; English.
XX The invention relates to a novel method for detecting a nucleic acid
XX having at least two portions comprising contacting the nucleic acid with
XX at least two types of nanoparticles, such as gold, having attached
XX oligonucleotides and observing a detectable change brought about by
XX hybridisation of the oligonucleotides on the nanoparticles with the
XX nucleic acid. The method of the invention may be useful for detecting a
XX nucleic acid, preferably viral RNA or DNA, bacterial DNA, a gene
XX associated with a disease, a fungal DNA, synthetic DNA or RNA, a
XX structurally modified natural or synthetic DNA or RNA or a product of a

CC polymerase chain reaction amplification. The detected nucleic acid may be
 CC utilised for diagnosis of disease, sequencing of nucleic acids,
 CC forensics, paternity testing, cell line authentication and monitoring
 CC gene therapy. The method for detecting the nucleic acids is based on
 CC observing a colour change with the naked eye and is cheap, fast, simple,
 CC and robust, requiring no specialised or expensive equipment. The current
 CC sequence is that of the oligonucleotide which is related to a thiol-
 CC modified oligonucleotide-gold colloid conjugate probe of the invention.
 XX

SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 559

ID ADI32905
 ADI32905 standard; DNA; 20 BP.

AC ADI32905;

XX 06-MAY-2004 (first entry)

XX Synthetic thiol-modified oligo-gold colloid conjugate probe - SEQ 55.

XX nanoparticle; gold; disease; forensic; paternity testing;

KW cell line authentication; gene therapy; ss; gold colloid conjugate;
 KW probe.

XX Synthetic.

XX US2003207296-A1.

XX 06-NOV-2003.

XX 08-OCT-2002; 2002US-00366983.

XX 29-JUL-1996; 96US-0031809P.

XX 21-JUL-1997; 97WO-US012783.

XX 29-JAN-1999; 99US-00240755.

XX 25-JUN-1999; 99US-00344667.

XX 13-JAN-2000; 2000US-0176409P.

XX 28-MAR-2000; 2000US-0192699P.

XX 26-APR-2000; 2000US-0200161P.

XX 26-JUN-2000; 2000US-00603830.

XX 11-AUG-2000; 2000US-0213906P.

XX 08-DEC-2000; 2000US-0254392P.

XX 08-DEC-2000; 2000US-0254418P.

XX 11-DEC-2000; 2000US-0255235P.

XX 12-DEC-2000; 2000US-0255236P.

XX 12-JAN-2001; 2001US-00760500.

XX 28-MAR-2001; 2001US-00820279.

XX 09-APR-2001; 2001US-0282640P.

XX 10-AUG-2001; 2001US-00927777.

XX 09-OCT-2001; 2001US-0327864P.

XX 07-DEC-2001; 2001US-00008978.

XX (PARK/) PARK S.

XX (TATO/) TATON T A.

XX (MIRK/) MIRKIN C A.

XX Park S, Taton TA, Mirkin CA;

XX WPI; 2004-059754/06.

XX Detection of nucleic acid, e.g. viral RNA or DNA, comprises contacting
 PT nucleic acid with different types of nanoparticles having attached

PT oligonucleotides and observing detectable change brought about by
 PT hybridization.

XX Example 18; SEQ ID NO 55; 206pp; English.

XX The invention relates to a novel method for detecting a nucleic acid
 CC having at least two portions comprising contacting the nucleic acid with
 CC at least two types of nanoparticles, such as gold, having attached
 CC oligonucleotides and observing a detectable change brought about by
 CC hybridisation of the oligonucleotides on the nanoparticles with the
 CC nucleic acid. The method of the invention may be useful for detecting a
 CC nucleic acid, preferably viral RNA or DNA, bacterial DNA, a gene
 CC associated with a disease, a fungal DNA, synthetic DNA or RNA,
 CC structurally modified natural or synthetic DNA or RNA or a product of a
 CC polymerase chain reaction amplification. The detected nucleic acid may be
 CC utilised for diagnosis of disease, sequencing of nucleic acids,
 CC forensics, paternity testing, cell line authentication and monitoring
 CC gene therapy. The method for detecting the nucleic acids is based on
 CC observing a colour change with the naked eye and is cheap, fast, simple,
 CC and robust, requiring no specialised or expensive equipment. The current
 CC sequence is that of the synthetic thiol-modified oligonucleotide-gold
 CC colloid conjugate probe of the invention which is linked via a thiol
 CC group to a gold nanoparticle.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 560

ADK69880/c

ID ADK69880 standard; DNA; 20 BP.

XX ADK69880;

XX 06-MAY-2004 (first entry)

XX Sulphurised oligonucleotide #10.

XX Phosphorothioate backbone; sulphurised oligonucleotide; ss.

XX Unidentified.

Key Location/Qualifiers
 modified_base 1..20

/tag= a
 /mod_base= OTHER
 /note= "Phosphorothioate backbone; 2'-O-methoxyethyl
 residues"

US2003212267-A1.

XX 13-NOV-2003.

XX 12-DEC-2002; 2002US-00181200.

XX 11-JAN-2000; 2000US-00481486.

XX 10-JAN-2001; 2001WO-US000715.

XX (COLE/) COLE D L.

XX (RAVI/) RAVIKUMAR V T.

XX (CHER/) CHERUVALLATH Z S.

XX Cole DL, Ravikumar VT, Cheruvallath ZS;

XX WPI; 2004-069376/07.

PT Preparation of phosphorothioate oligonucleotides involves oxidizing
 PT phosphite intermediate with acetyl disulfide in acetonitrile for time to
 XX effect conversion of phosphite intermediate to phosphorothioate.
 XX
 XX Example 12; SEQ ID NO 10; 8pp; English.
 XX
 CC The invention relates to phosphorothioate oligonucleotides having
 CC nucleoside with 240 modification are prepared by phosphorylating 5'-
 CC hydroxyl of a nucleic acid moiety having a nucleoside with 2'
 CC modification in an acetonitrile containing solvent mixture to form a
 CC phosphite intermediate; and oxidising the phosphite intermediate with an
 CC acetyl disulfide in an acetonitrile for a time to effect conversion of
 CC the phosphite intermediate to phosphorothioate. The invented method
 CC achieves high yields and greater efficiency. The present sequence is
 CC sulphurised oligonucleotide used in the exemplification of the invention.
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 561
 ADK69885/C
 ID ADK69885 standard; DNA; 20 BP.
 XX
 AC ADK69885;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Sulphurised oligonucleotide #15.
 XX
 KW Phosphorothioate backbone; sulphurised oligonucleotide; ss.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod base= OTHER
 FT /note= "Phosphorothioate backbone; 2'-O-methoxyethyl
 FT residues"
 XX
 XX US2003212267-A1.
 XX
 XX 13-NOV-2003.
 XX
 XX 12-DEC-2002; 2002US-00181200.
 XX
 XX 11-JAN-2000; 2000US-00481486.
 PR 10-JAN-2001; 2001WO-US000715.
 XX
 XX (COLE/) COLE D L.
 PA (RAVI/) RAVIKUMAR V T.
 PA (CHER/) CHERUVALLATH Z S.
 XX
 PI Cole DL, Ravikumar VT, Cheruvallath ZS;
 DR WPI; 2004-069376/07.
 XX
 XX Preparation of phosphorothioate oligonucleotides involves oxidizing
 PT phosphite intermediate with acetyl disulfide in acetonitrile for time to
 PT effect conversion of phosphite intermediate to phosphorothioate.
 XX
 XX Example 22; SEQ ID NO 15; 8pp; English.
 XX
 CC The invention relates to phosphorothioate oligonucleotides having
 CC nucleoside with 240 modification are prepared by phosphorylating 5'-

CC hydroxyl of a nucleic acid moiety having a nucleoside with 2'
 CC modification in an acetonitrile containing solvent mixture to form a
 CC phosphite intermediate; and oxidising the phosphite intermediate with an
 CC acetyl disulfide in an acetonitrile for a time to effect conversion of
 CC the phosphite intermediate to phosphorothioate. The invented method
 CC achieves high yields and greater efficiency. The present sequence is
 CC sulphurised oligonucleotide used in the exemplification of the invention.
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 562
 ADK74969/C
 ID ADK74969 standard; DNA; 20 BP.
 XX
 AC ADK74969;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #2303.
 XX
 KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
 KW diabetic neuropathy; arthritic pain; migraine headache;
 KW infantile epilepsy; ataxia; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004016754-A2.
 XX
 PD 26-FEB-2004.
 XX
 XX 14-AUG-2003; 2003WO-US025465.
 XX
 XX 14-AUG-2002; 2002US-0403416P.
 PR
 XX (PHAA) PHARMACIA CORP.
 XX
 XX Robertds SL;
 XX
 XX WPI; 2004-203785/19.
 XX
 XX New antisense compound targeted to a nucleic acid molecule encoding
 PT Nav1.3, useful for treating a disease or condition associated
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
 PT disorder, or ataxia.
 XX
 XX Claim 4; SEQ ID NO 2303; 417pp; English.
 XX
 CC The present invention relates to an antisense compound targeted to a
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The
 CC compound and composition are useful for treating a disease or condition
 CC associated with Nav1.3, e.g. pain including but not limited to
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate
 CC headache; seizure disorder such as childhood seizure disorder, including
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
 CC sequence represents a chimeric phosphorothioate oligonucleotide with
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
 CC human Nav1.3 expression, the oligonucleotides are designed to target
 CC different regions of the human Nav1.3 RNA.
 XX
 XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

```
Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
    |||||
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 563
ADK74889/c
ID ADK74889 standard; DNA; 20 BP.
XX
AC ADK74889;
XX
XX 20-MAY-2004 (first entry)
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #2223.
DE
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
XX 26-FEB-2004.
XX
XX 14-AUG-2003; 2003WO-US025465.
XX
XX 14-AUG-2002; 2002US-0403416P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Roberds SL;
XX
XX WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 2223; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache, seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
    |||||
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 564
ADK74889/c
ID ADK74889 standard; DNA; 20 BP.
XX
AC ADK74889;
XX
XX 20-MAY-2004 (first entry)
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #2223.
DE
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
XX 26-FEB-2004.
XX
XX 14-AUG-2003; 2003WO-US025465.
XX
XX 14-AUG-2002; 2002US-0403416P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Roberds SL;
XX
XX WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 2223; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache, seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
```

```
ADL33726/c
ID ADL33726 standard; DNA; 20 BP.
XX
AC ADL33726;
XX
XX 03-JUN-2004 (first entry)
XX
XX LNA oligomer #5.
XX
XX Detection; isolation; locked nucleic acid; LNA; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
modified_base 1..20
/*tag= b
/mod_base= OTHER
/*note= "Optionally LNA nucleotides"
modified_base 1
/*tag= a
/mod_base= OTHER
/*note= "Optionally biotinylated or 5' AQ2-HEG3, where AQ
is anthraquinone and HEG is hexa-ethylene glycol"
XX
XX WO2004020575-A2.
XX
XX 11-MAR-2004.
XX
XX 20-JUN-2003; 2003WO-IB006354.
XX
XX 24-JUN-2002; 2002US-0390928P.
XX
XX (EXIQ-) EXIQON AS.
XX
XX Kauppinen S, Jacobsen N;
XX
XX WPI; 2004-315512/29.
XX
XX Detecting and/or isolating nucleic acid molecule having homopolymeric
PT sequence or repetitive element or conserved nucleotide sequence involves
PT treating sample containing nucleic acid compounds with locked nucleic
PT acid oligonucleotide.
XX
XX Claim 22; Page 51; 104pp; English.
XX
XX The present invention relates to a method (M1) for detecting and/or
CC isolating a nucleic acid having a homopolymeric sequence or repetitive
CC element or conserved nucleotide sequence. (M1) comprises treating a
CC sample containing nucleic acid compounds with an locked nucleic acid
CC (LNA) oligonucleotide (LO) to thereby detect and/or isolate a nucleic
CC acid having the homopolymeric sequence or repetitive element or conserved
CC nucleotide sequence. (M1) is useful for detecting and isolating nucleic
CC acids released from a lysed complex biological mixture comprising nucleic
CC acids. The present sequence is a LNA oligomer, used to illustrate the
CC invention.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
    |||||
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 565
ADM13992/c
ID ADM13992 standard; DNA; 20 BP.
XX
AC ADM13992;
XX
```


01-JUL-2004 (first entry)

Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:179.

chimeric; antisense oligonucleotide; phosphorothioate; human; microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor; microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic; immunomodulatory; cardiant; neuroprotective; antiinflammatory; neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological; immunomodulatory; cardiovascular; gene therapy; inflammation; Alzheimer's disease; arthritis; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; ss.

Homo sapiens.

Synthetic.

Key	Location/Qualifiers
modified_base	1..20
	/*tag= b
	/mod_base= OTHER
	/note= "phosphorothioate linkages and all cytidine residues are 5-methylcytidines"
modified_base	1..5
	/*tag= a
	/mod_base= OTHER
	/note= "2'-O-methoxyethyls"
modified_base	16..20
	/*tag= c
	/mod_base= OTHER
	/note= "2'-O-methoxyethyls"

WO2004028458-A2.

08-APR-2004.

25-SEP-2003; 2003WO-US030374.

25-SEP-2002; 2002US-0413549P.

(PHAA) PHARMACIA CORP.

Gierse JK;

WPI; 2004-305094/28.

New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or ischemia.

Claim 4; SEQ ID NO 179; 132pp; English.

The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 9q34.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. mPGES-1 chimeric antisense oligonucleotides and antisense compounds have cytosolic, antidiabetic, immunomodulatory, cardiant, neuroprotective, antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic, ophthalmological, immunomodulatory and cardiovascular activities, and can be used as mPGES-1 inhibitors and in gene therapy. The antisense compound can be used for preparing a composition for treating a disease or condition associated with mPGES-1 e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.

Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 566
 ADM13994/c
 ID ADM13994 standard; DNA; 20 BP.
 XX AC
 XX ADM13994;
 XX XX
 DT 01-JUL-2004 (first entry)
 XX XX
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:181.
 XX XX
 KW chimeric; antisense oligonucleotide; phosphorothioate; human; microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor; microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic; immunomodulatory; cardiant; neuroprotective; antiinflammatory; neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological; immunomodulatory; cardiovascular; gene therapy; inflammation; Alzheimer's disease; arthritis; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; ss.
 XX OS
 OS Homo sapiens.
 OS Synthetic.
 XX XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX XX
 PN WO2004028458-A2.
 XX XX
 PD 08-APR-2004.
 XX XX
 XX 25-SEP-2003; 2003WO-US030374.
 XX XX
 PR 25-SEP-2002; 2002US-0413549P.
 PA (PHAA) PHARMACIA CORP.
 XX XX
 PI Gierse JK;
 XX XX
 DR WPI; 2004-305094/28.
 XX XX
 PT New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or ischemia.
 PT
 PT Claim 4; SEQ ID NO 181; 132pp; English.
 PS
 XX The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 9q34.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. mPGES-1 chimeric antisense oligonucleotides and antisense compounds have cytosolic, antidiabetic, immunomodulatory, cardiant, neuroprotective, antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic, ophthalmological, immunomodulatory and cardiovascular activities, and can be used as mPGES-1 inhibitors and in gene therapy. The antisense compound can be used for preparing a composition for treating a disease or condition associated with mPGES-1 e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.

CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, neurotropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 567

ADM13999/c

ID ADM13999 standard; DNA; 20 BP.

XX

AC ADM13999;

XX

01-JUL-2004 (first entry)

XX

Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:186.

XX

KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; neurotropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

XX

Key Location/Qualifiers
 modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX

WO2004028458-A2.

XX

08-APR-2004.

XX

25-SEP-2003; 2003WO-US030374.

XX

25-SEP-2002; 2002US-0413549P.

XX

(PHAA) PHARMACIA CORP.

PA

XX Gierse JK;
 PI
 XX
 DR WPI; 2004-305094/28.
 XX
 PT New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.

XX Claim 4; SEQ ID NO 186; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, neurotropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 568

ADM14008/c

ID ADM14008 standard; DNA; 20 BP.

XX

AC ADM14008;

XX

01-JUL-2004 (first entry)

XX

Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:195.

XX

KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; neurotropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

XX

Key Location/Qualifiers

modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16. .20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
PN WO2004028458-A2.
XX
XX
PD 08-APR-2004.
XX
PF 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA) PHARMACIA CORP.
PI Gierse JK;
XX
XX WPI; 2004-305094/28. .
DR
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
FT encoding mPGES-1, useful for preparing a composition for treating e.g.,
FT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
FT ischemia.
XX
XX Claim 4; SEQ ID NO 195; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAA 1
RESULT 569
ADM14002/C
ID ADM14002 standard; DNA; 20 BP.
XX
XX ADM14002;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:189.
DE
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;

KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; sg.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
XX modified_base 1. .20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1. .5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16. .20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
PN WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA) PHARMACIA CORP.
XX Gierse JK;
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX Claim 4; SEQ ID NO 189; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAA 1

CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02; Indels 0; Gaps 0;
 Matches 20; Conservative 0; Mismatches 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 |||||||||||||||||||
 |||||||||||||||||||

RESULT 571
 ADM14151/c
 ID ADM14151 standard; DNA; 20 BP.
 XX
 AC ADM14151;
 XX
 DT 01-JUL-2004 (first entry)
 XX
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:338.
 XX
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cycostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.

Key Location/Qualifiers
 modified_base 1..20
 /tag= b
 /mod_base= OTHER
 /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"
 modified_base 1..5
 /tag= a
 /mod_base= OTHER
 /note= "2'-O-methoxyethyls"
 modified_base 16..20
 /tag= c
 /mod_base= OTHER
 /note= "2'-O-methoxyethyls"
 WO2004028458-A2.
 08-APR-2004.
 25-SEP-2003; 2003WO-US030374.
 25-SEP-2002; 2002US-0413549P.
 (PHAA) PHARMACIA CORP.
 Gierse JK;
 WPI; 2004-305094/28.
 New antisense compound, having a sequence targeted to a nucleic acid
 encoding mPGES-1, useful for preparing a composition for treating e.g.,
 inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 ischemia.
 Claim 4; SEQ ID NO 277; 132pp; English.
 The present sequence represents a chimeric antisense oligonucleotide
 targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 human mPGES-1 gene is located on chromosome 9, more specifically to
 9q34.3. The present invention also describes: (1) antisense compounds,
 having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 inhibits its expression; (2) a method of inhibiting the expression of
 mPGES-1 in cells or tissues; and (3) a method of treating an animal
 having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 antisense oligonucleotides and antisense compounds have cycostatic,
 antidiabetic, immunomodulator, cardiant, neuroprotective,
 antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 ophthalmological, immunomodulatory and cardiovascular activities, and can

RESULT 570
 ADM14090/c
 ID ADM14090 standard; DNA; 20 BP.
 XX
 AC ADM14090;
 XX
 DT 01-JUL-2004 (first entry)
 XX
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:277.
 XX
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cycostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.

Key Location/Qualifiers
 modified_base 1..20
 /tag= b
 /mod_base= OTHER
 /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"
 modified_base 1..5
 /tag= a
 /mod_base= OTHER
 /note= "2'-O-methoxyethyls"
 modified_base 16..20
 /tag= c
 /mod_base= OTHER
 /note= "2'-O-methoxyethyls"
 WO2004028458-A2.
 08-APR-2004.
 25-SEP-2003; 2003WO-US030374.
 25-SEP-2002; 2002US-0413549P.
 (PHAA) PHARMACIA CORP.
 Gierse JK;
 WPI; 2004-305094/28.
 New antisense compound, having a sequence targeted to a nucleic acid
 encoding mPGES-1, useful for preparing a composition for treating e.g.,
 inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 ischemia.
 Claim 4; SEQ ID NO 277; 132pp; English.
 The present sequence represents a chimeric antisense oligonucleotide
 targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 human mPGES-1 gene is located on chromosome 9, more specifically to
 9q34.3. The present invention also describes: (1) antisense compounds,
 having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 inhibits its expression; (2) a method of inhibiting the expression of
 mPGES-1 in cells or tissues; and (3) a method of treating an animal
 having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 antisense oligonucleotides and antisense compounds have cycostatic,
 antidiabetic, immunomodulator, cardiant, neuroprotective,
 antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 ophthalmological, immunomodulatory and cardiovascular activities, and can

```

XX PS Claim 4; SEQ ID NO 338; 132pp; English.
XX
CC The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (MPGES-1). The
CC human MPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC MPGES-1, which specifically hybridise with the nucleic acid MPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC MPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with MPGES-1. MPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as MPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with MPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db ||||| 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 572
ADM13997/c
ID ADM13997 standard; DNA; 20 BP.
XX
XX ADM13997;
AC
CC
DT 01-JUL-2004 (first entry)
XX
XX Human MPGES-1 chimeric antisense oligonucleotide SEQ ID NO:184.
XX
KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; MPGES-1; MPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20 /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5 /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20 /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX

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PD 08-APR-2004.
XX
PF 25-SEP-2003; 2003WO-US030374.
XX
PR 25-SEP-2002; 2002US-0413549P.
XX
PA (PHAA ) PHARMACIA CORP.
XX
PI Gierse JK;
XX
DR WPI; 2004-305094/28.
XX
PT New antisense compound, having a sequence targeted to a nucleic acid
PT encoding MPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
PS Claim 4; SEQ ID NO 184; 132pp; English.
XX
CC The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (MPGES-1). The
CC human MPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC MPGES-1, which specifically hybridise with the nucleic acid MPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC MPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with MPGES-1. MPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as MPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with MPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db ||||| 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 573
ADM14017/c
ID ADM14017 standard; DNA; 20 BP.
XX
XX ADM14017;
AC
CC
DT 01-JUL-2004 (first entry)
XX
XX Human MPGES-1 chimeric antisense oligonucleotide SEQ ID NO:204.
XX
KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; MPGES-1; MPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX Location/Qualifiers
FH Key

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FT modified_base 1..20
FT /tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT
FT
PN WO2004028458-A2.
XX
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 204; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytosstatic,
XX anti diabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
XX |||||
XX Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 574
XX ADM14018/c
XX ID ADM14018 standard; DNA; 20 BP.
XX
XX AC ADM14018;
XX
XX 01-JUL-2004 (first entry)
XX

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DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:205.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages and all cytidine
XX residues are 5-methylcytidines"
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 205; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytosstatic,
XX anti diabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;

```

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CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

      Query Match          0.7%; Score 20; DB 1; Length 20;
      Best Local Similarity 100.0%; Pred No. 6.8e+02;
      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 576
ADM14257/c
ID ADM14257 standard; DNA; 20 BP.
XX
AC ADM14257;
XX
DT 01-JUL-2004 (first entry)
XX
DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:444.
XX
KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20 /*tag= b
FT /*mod_base= OTHER
FT /*note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /*mod_base= OTHER
FT /*note= "2'-O-methoxyethyls"
FT modified_base 16..20
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FT /*mod_base= OTHER
FT /*note= "2'-O-methoxyethyls"
XX
PN WO2004028458-A2.
XX
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;

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XX DR WPI; 2004-305094/28.
XX FT
XX FT
XX FT New antisense compound, having a sequence targeted to a nucleic acid
XX FT encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX FT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX FT ischemia.
XX FT
XX PS Claim 4; SEQ ID NO 444; 132pp; English.
XX FT
XX CC The present sequence represents a chimeric antisense oligonucleotide
XX CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX CC human mPGES-1 gene is located on chromosome 9, more specifically to
XX CC 9q34.3. The present invention also describes: (1) antisense compounds,
XX CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX CC inhibits its expression; (2) a method of inhibiting the expression of
XX CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX CC antisense oligonucleotides and antisense compounds have cytostatic,
XX CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX CC ophthalmological, immunomodulatory and cardiovascular activities, and can
XX CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX CC can be used for preparing a composition for treating a disease or
XX CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 577
ADM14000/c
ID ADM14000 standard; DNA; 20 BP.
XX AC ADM14000;
XX CC
XX DT 01-JUL-2004 (first entry)
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:187.
XX CC chimeric; antisense oligonucleotide; phosphorothioate; human;
XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;
XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX KW reperfusion injury; ophthalmic disorder; immunological disorder;
XX KW cardiovascular disorder; neurological disorder; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FT
XX PH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkages and all cytidine
XX FT residues are 5-methylcytidines"
XX FT modified_base 1..5
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls"
XX FT

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FT modified_base 16..20
FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "2'-O-methoxyethyls"
XX PN WO2004028458-A2.
XX PD 08-APR-2004.
XX XX
XX XX 25-SEP-2003; 2003WO-US030374.
XX XX
XX PR 25-SEP-2002; 2002US-0413549P.
XX XX
XX PA (PHAA ) PHARMACIA CORP.
XX PI
XX PI Gierse JK;
XX XX
XX DR WPI; 2004-305094/28.
XX FT
XX FT New antisense compound, having a sequence targeted to a nucleic acid
XX FT encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX FT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX FT ischemia.
XX FT
XX PS Claim 4; SEQ ID NO 187; 132pp; English.
XX CC The present sequence represents a chimeric antisense oligonucleotide
XX CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX CC human mPGES-1 gene is located on chromosome 9, more specifically to
XX CC 9q34.3. The present invention also describes: (1) antisense compounds,
XX CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX CC inhibits its expression; (2) a method of inhibiting the expression of
XX CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX CC antisense oligonucleotides and antisense compounds have cytostatic,
XX CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX CC ophthalmological, immunomodulatory and cardiovascular activities, and can
XX CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX CC can be used for preparing a composition for treating a disease or
XX CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 578
ADM14006/c
ID ADM14006 standard; DNA; 20 BP.
XX AC ADM14006;
XX CC
XX DT 01-JUL-2004 (first entry)
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:193.
XX CC chimeric; antisense oligonucleotide; phosphorothioate; human;
XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;
XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX FT

```


KW reperfusion injury; ophthalmic disorder; immunological disorder;
 XX cardiovascular disorder; neurological disorder; ss.
 OS Homo sapiens.
 XX Synthetic.
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX WO2004028458-A2.
 PN 08-APR-2004.
 PD 25-SEP-2003; 2003WO-US030374.
 PF 25-SEP-2002; 2002US-0413549P.
 PR (PHAA) PHARMACIA CORP.
 PA Gierse JK;
 XX WPI; 2004-305094/28.
 DR New antisense compound, having a sequence targeted to a nucleic acid
 XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 XX Claim 4; SEQ ID NO 193; 132pp; English.
 PS The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antiinflammatory, neuroprotective, cardiant, neuroprotective,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 579

ADM14014/c
 ID ADM14014 standard; DNA; 20 BP.
 XX ADM14014;
 XX 01-JUL-2004 (first entry)
 DT Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:201.
 DE chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX Homo sapiens.
 OS Synthetic.
 XX Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 XX WO2004028458-A2.
 PN 08-APR-2004.
 PD 25-SEP-2003; 2003WO-US030374.
 PF 25-SEP-2002; 2002US-0413549P.
 PR (PHAA) PHARMACIA CORP.
 PA Gierse JK;
 XX WPI; 2004-305094/28.
 DR New antisense compound, having a sequence targeted to a nucleic acid
 XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.
 XX Claim 4; SEQ ID NO 201; 132pp; English.
 PS The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antiinflammatory, neuroprotective, cardiant, neuroprotective,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 580
 ADM14020/C
 ID ADM14020 standard; DNA; 20 BP.

XX ADM14020;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:207.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.
 OS Synthetic.

XX Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.

XX Claim 4; SEQ ID NO 207; 132pp; English.

XX

XX

CC The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 581

ADM13991/C

ID ADM13991 standard; DNA; 20 BP.

XX ADM13991;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:178.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

XX Synthetic.

XX Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX

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PF 25-SEP-2003; 2003WO-US030374.
XX
PR 25-SEP-2002; 2002US-0413549P.
XX
PA (PHAA ) PHARMACIA CORP.
XX
PI Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
FS Claim 4; SEQ ID NO 178; 132pp; English.
XX
CC The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 582
ADM14003/C
ID ADM14003 standard; DNA; 20 BP.
XX
AC ADM14003;
XX
XX 01-JUL-2004 (first entry)
XX
DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:190.
XX
KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b

```

```

FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 190; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 583
ADM14005/C
ID ADM14005 standard; DNA; 20 BP.
XX
XX ADM14005;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:192.
XX

```

KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA) PHARMACIA CORP.
XX Gierse JK;
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 192; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytosstatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match 0.78; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||||
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 584
ADM13995/c
ID ADM13995 standard; DNA; 20 BP.
XX
XX AC ADM13995;
XX DT 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:182.
DE
XX
KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA) PHARMACIA CORP.
XX Gierse JK;
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 182; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal

CC having a disease or condition associated with mpGES-1. mpGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mpGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mpGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 585

ADM14011/c

ID ADM14011 standard; DNA; 20 BP.

XX AC

XX ADM14011;

XX 01-JUL-2004 (first entry)

XX Human mpGES-1 chimeric antisense oligonucleotide SEQ ID NO:198.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mpGES-1; mpGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"

XX W02004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

DR

XX

PT New antisense compound, having a sequence targeted to a nucleic acid
 encoding mpGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischemia.

PS Claim 4; SEQ ID NO 198; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mpGES-1). The
 CC human mpGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mpGES-1, which specifically hybridise with the nucleic acid mpGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mpGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mpGES-1. mpGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mpGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mpGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 586

ADM14240/c

ID ADM14240 standard; DNA; 20 BP.

XX AC

XX ADM14240;

XX 01-JUL-2004 (first entry)

XX Human mpGES-1 chimeric antisense oligonucleotide SEQ ID NO:427.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mpGES-1; mpGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /tag= c

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FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
PN WO2004028458-A2.
PD 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 427; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 587
ADM14009/c
ID ADM14009 standard; DNA; 20 BP.
XX
XX ADM14009;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:196.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
```

```
XX Homo sapiens.
OS Synthetic.
OS
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages and all cytidine
XX residues are 5-methylcytidines"
XX modified_base 1..5
XX /tag= a
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX modified_base 16..20
XX /tag= c
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 196; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 588
ADM14010/c
ID ADM14010 standard; DNA; 20 BP.
```

AC ADM14010;
 XX
 XX
 DT 01-JUL-2004 (first entry)
 XX
 XX
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:197.
 XX
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT
 FT WO2004028458-A2.
 XX
 XX
 PD 08-APR-2004.
 XX
 XX
 PF 25-SEP-2003; 2003WO-US030374.
 XX
 XX
 PR 25-SEP-2002; 2002US-0413549P.
 XX
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Gierse JK;
 PI
 XX WPI; 2004-305094/28.
 DR
 XX New antisense compound, having a sequence targeted to a nucleic acid
 FT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 FT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 FT ischemia.
 FT
 XX Claim 4; SEQ ID NO 197; 132pp; English.
 PS
 XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytosolic,
 CC antiarthritic, immunomodulatory, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or

CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 XX
 XX
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. NO. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 589
 ADM14089/c
 ID ADM14089 standard; DNA; 20 BP.
 XX
 AC ADM14089;
 XX
 XX
 DT 01-JUL-2004 (first entry)
 XX
 DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:276.
 XX
 KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT
 FT WO2004028458-A2.
 XX
 XX
 PD 08-APR-2004.
 XX
 XX
 PF 25-SEP-2003; 2003WO-US030374.
 XX
 XX
 PR 25-SEP-2002; 2002US-0413549P.
 XX
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Gierse JK;
 PI
 XX WPI; 2004-305094/28.
 DR
 XX New antisense compound, having a sequence targeted to a nucleic acid
 FT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 FT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 FT ischemia.
 FT
 XX Claim 4; SEQ ID NO 276; 132pp; English.
 PS
 XX The present sequence represents a chimeric antisense oligonucleotide
 CC

targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 9q34.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. mPGES-1 chimeric antisense oligonucleotides and antisense compounds have cytostatic, antidiabetic, immunomodulatory, cardiant, neuroprotective, antiinflammatory, immunomodulatory and cardiovascular activities, and can be used as mPGES-1 inhibitors and in gene therapy. The antisense compound can be used for preparing a composition for treating a disease or condition associated with mPGES-1 e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.

Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
|||||
Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 590
ADM14016/c

ID ADM14016 standard; DNA; 20 BP.

XX ADM14016;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:203.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; neurotropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.
OS Synthetic.

XX Key Location/Qualifiers

XX modified_base 1..20 /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"

XX modified_base 1..5

FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c

FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX

PR 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.

XX Claim 4; SEQ ID NO 203; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulatory, cardiant, neuroprotective,
XX antiinflammatory, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
|||||
Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 591
ADM14075/c

ID ADM14075 standard; DNA; 20 BP.

XX ADM14075;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:262.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; neurotropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.
OS Synthetic.

XX Key Location/Qualifiers

XX modified_base 1..20 /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT


```

FT modified_base      residues are 5-methylcytidines"
FT 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 262; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 592
ADM14189/c
ID ADM14189 standard; DNA; 20 BP.
XX
XX ADM14189;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:376.
DE
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;

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KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW immunomodulatory; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; Gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
OS
OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages and all cytidine
XX residues are 5-methylcytidines"
XX modified_base 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX modified_base 16..20
XX /*tag= c
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 376; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

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Db      20 AAAAAAAAAAAAAAAAAAAAA 1
|||||
RESULT 593
ADM13996/c
ID      ADM13996 standard; DNA; 20 BP.
XX
XX      ADM13996;
XX
DT      01-JUL-2004 (first entry)
XX
DE      Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:183.
XX
KW      chimeric; antisense oligonucleotide; phosphorothioate; human;
KW      microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW      microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
KW      immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW      neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW      immunomodulatory; cardiovascular; gene therapy; inflammation;
KW      Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW      reperfusion injury; ophthalmic disorder; immunological disorder;
KW      cardiovascular disorder; neurological disorder; ss.
XX
OS      Homo sapiens.
OS      Synthetic.
XX
FH      Key
FH      modified_base 1..20
FH      Location/Qualifiers
FH      /tag= b
FH      /mod_base= OTHER
FH      /note= "phosphorothioate linkages and all cytidine
FH      residues are 5-methylcytidines"
FT
FT      modified_base 1..5
FT      /tag= a
FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"
FT
FT      modified_base 16..20
FT      /tag= c
FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"
XX
XX      WO2004028458-A2.
XX
XX      08-APR-2004.
XX
XX      25-SEP-2003; 2003WO-US030374.
XX
XX      25-SEP-2002; 2002US-0413549P.
XX
XX      (PHAA ) PHARMACIA CORP.
XX
XX      Gierse JK;
XX
XX      WPI; 2004-305094/28.
XX
XX      New antisense compound, having a sequence targeted to a nucleic acid
XX      encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX      inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX      ischemia.
XX
XX      Claim 4; SEQ ID NO 183; 132pp; English.
XX
XX      The present sequence represents a chimeric antisense oligonucleotide
XX      targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX      human mPGES-1 gene is located on chromosome 9, more specifically to
XX      9q34.3. The present invention also describes: (1) antisense compounds,
XX      having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX      mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX      inhibits its expression; (2) a method of inhibiting the expression of
XX      mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX      having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX      antisense oligonucleotides and antisense compounds have cytostatic,

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```

CC      antidiabetic, immunomodulator, cardiant, neuroprotective,
CC      antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC      ophthalmological, immunomodulatory and cardiovascular activities, and can
CC      be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC      can be used for preparing a composition for treating a disease or
CC      condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC      disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC      ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX      Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX      Query Match 0.7%; Score 20; DB 1; Length 20;
XX      Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX      Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY      2709 AAAAAAAAAAAAAAAAAAAAA 2728
DB      20 AAAAAAAAAAAAAAAAAAAAA 1
|||||
RESULT 594
ADM14001/c
ID      ADM14001 standard; DNA; 20 BP.
XX
XX      ADM14001;
XX
DT      01-JUL-2004 (first entry)
XX
DE      Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:188.
XX
KW      chimeric; antisense oligonucleotide; phosphorothioate; human;
KW      microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW      microsomal prostaglandin E2 synthase inhibitor; cytosstatic; antidiabetic;
KW      immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW      neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW      immunomodulatory; cardiovascular; gene therapy; inflammation;
KW      Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW      reperfusion injury; ophthalmic disorder; immunological disorder;
KW      cardiovascular disorder; neurological disorder; ss.
XX
XX      Homo sapiens.
XX      Synthetic.
XX
FH      Key
FH      modified_base 1..20
FH      Location/Qualifiers
FH      /tag= b
FH      /mod_base= OTHER
FH      /note= "phosphorothioate linkages and all cytidine
FH      residues are 5-methylcytidines"
FT
FT      modified_base 1..5
FT      /tag= a
FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"
FT
FT      modified_base 16..20
FT      /tag= c
FT      /mod_base= OTHER
FT      /note= "2'-O-methoxyethyls"
XX
XX      WO2004028458-A2.
XX
XX      08-APR-2004.
XX
XX      25-SEP-2003; 2003WO-US030374.
XX
XX      25-SEP-2002; 2002US-0413549P.
XX      (PHAA ) PHARMACIA CORP.
XX
XX      Gierse JK;
XX
XX      WPI; 2004-305094/28.
XX
XX      New antisense compound, having a sequence targeted to a nucleic acid
XX      encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX      inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX      ischemia.
XX
XX      Claim 4; SEQ ID NO 183; 132pp; English.
XX
XX      The present sequence represents a chimeric antisense oligonucleotide
XX      targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX      human mPGES-1 gene is located on chromosome 9, more specifically to
XX      9q34.3. The present invention also describes: (1) antisense compounds,
XX      having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX      mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX      inhibits its expression; (2) a method of inhibiting the expression of
XX      mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX      having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX      antisense oligonucleotides and antisense compounds have cytostatic,

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PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischaemia.
XX
XX Claim 4; SEQ ID NO 188; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antiinflammatory, neuroprotective, cardiant, neuroprotective,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
XX Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 595
XX ADM14004/C
XX ID ADM14004 standard; DNA; 20 BP.
XX AC ADM14004;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:191.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages and all cytidine
XX residues are 5-methylcytidines"
XX modified_base 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX modified_base 16..20
XX /*tag= c
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.
XX 08-APR-2004.
XX 25-SEP-2003; 2003WO-US030374.
XX 25-SEP-2002; 2002US-0413549P.
XX (PHAA) PHARMACIA CORP.
XX Gierse JK;
XX WPI; 2004-305094/28.
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischaemia.
XX Claim 4; SEQ ID NO 191; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antiinflammatory, neuroprotective, cardiant, neuroprotective,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
XX Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 596
XX ADM14012/C
XX ID ADM14012 standard; DNA; 20 BP.
XX AC ADM14012;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:199.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.

```

OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 199; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.78; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
XX |
XX Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 597
XX ADM14015/c
XX ID ADM14015 standard; DNA; 20 BP.
XX
XX AC ADM14015;

```

```

XX
DT 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:202.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
XX immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; cancer; ischaemia;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= b
XX /mod_base= OTHER
XX /note= "phosphorothioate linkages and all cytidine
XX residues are 5-methylcytidines"
XX modified_base 1..5
XX /*tag= a
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX modified_base 16..20
XX /*tag= c
XX /mod_base= OTHER
XX /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 202; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.78; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
XX |
XX Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 597
XX ADM14015/c
XX ID ADM14015 standard; DNA; 20 BP.
XX
XX AC ADM14015;

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SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 598
ADM14021/c
ID ADM14021 standard; DNA; 20 BP.
XX AC ADM14021;
XX DT 01-JUL-2004 (first entry)
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:208.
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkages and all cytidine
XX FT modified_base 1..5
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls"
XX FT modified_base 16..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls"
XX PN WO2004028458-A2.
XX OS 08-APR-2004.
XX PD 25-SEP-2003; 2003WO-US030374.
XX PF 25-SEP-2002; 2002US-0413549P.
XX PR (PHAA ) PHARMACIA CORP.
XX PA Gierse JK;
XX PI WPI; 2004-305094/28.
XX DR New antisense compound, having a sequence targeted to a nucleic acid
XX PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX PT ischemia.
XX PS Claim 4; SEQ ID NO 208; 132pp; English.
XX CC The present sequence represents a chimeric antisense oligonucleotide
XX CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX CC human mPGES-1 gene is located on chromosome 9, more specifically to
```

```
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulatory, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 599
ADM14388/c
ID ADM14388 standard; DNA; 20 BP.
XX AC ADM14388;
XX DT 01-JUL-2004 (first entry)
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:575.
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT modified_base 1..20
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkages and all cytidine
XX FT modified_base 1..5
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls"
XX FT modified_base 16..20
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls"
XX PN WO2004028458-A2.
XX OS 08-APR-2004.
XX PD 25-SEP-2003; 2003WO-US030374.
XX PF 25-SEP-2002; 2002US-0413549P.
XX PR (PHAA ) PHARMACIA CORP.
XX PA Gierse JK;
XX PI WPI; 2004-305094/28.
XX DR New antisense compound, having a sequence targeted to a nucleic acid
XX PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX PT ischemia.
XX PS Claim 4; SEQ ID NO 208; 132pp; English.
XX CC The present sequence represents a chimeric antisense oligonucleotide
XX CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX CC human mPGES-1 gene is located on chromosome 9, more specifically to
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PA (PHAA ) PHARMACIA CORP.
XX
PI Gierse JK;
XX
XX WPI; 2004-305094/28.
DR
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX Claim 4; SEQ ID NO 575; 132pp; English.
PS
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC anti-diabetic, immunomodulatory, cardiant, neuroprotective,
CC anti-inflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 600
ADM14013/c
ID ADM14013 standard; DNA; 20 BP.
XX
XX ADM14013;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:200.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytostatic; anti-diabetic;
XX immunomodulator; cardiant; neuroprotective; anti-inflammatory;
XX neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX immunomodulatory; cardiovascular; gene therapy; inflammation;
XX Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX reperfusion injury; ophthalmic disorder; immunological disorder;
XX cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5

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FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX Claim 4; SEQ ID NO 200; 132pp; English.
PS
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC anti-diabetic, immunomodulatory, cardiant, neuroprotective,
CC anti-inflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 601
ADM14019/c
ID ADM14019 standard; DNA; 20 BP.
XX
XX ADM14019;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:206.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
XX microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX microsomal prostaglandin E2 synthase inhibitor; cytostatic; anti-diabetic;
XX immunomodulator; cardiant; neuroprotective; anti-inflammatory;

```

KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.
 OS Synthetic.

XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes; cancer or
 PT ischaemia.

XX Claim 4; SEQ ID NO 206; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytosstatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. NO. 6.8e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 602

ADM14087/c

ID ADM14087 standard; DNA; 20 BP.

XX ADM14087;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:274.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 residues are 5-methylcytidines"
 FT modified_base 1..5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"
 FT modified_base 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"

PN WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 PT ischaemia.

XX Claim 4; SEQ ID NO 274; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytosstatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,

CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 603

ADM14300/c
 ID ADM14300 standard; DNA; 20 BP.

AC ADM14300;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:487.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

XX 08-APR-2004.

XX 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX Gierse JK;

XX WPI; 2004-305094/28.

XX New antisense compound, having a sequence targeted to a nucleic acid
 PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
 PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or

PT ischemia.

XX Claim 4; SEQ ID NO 487; 132pp; English.

XX The present sequence represents a chimeric antisense oligonucleotide
 CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
 CC human mPGES-1 gene is located on chromosome 9, more specifically to
 CC 9q34.3. The present invention also describes: (1) antisense compounds,
 CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antidiabetic, immunomodulator, cardiant, neuroprotective,
 CC antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
 CC ophthalmological, immunomodulatory and cardiovascular activities, and can
 CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 604

ADM13993/c

ID ADM13993 standard; DNA; 20 BP.

XX ADM13993;

XX 01-JUL-2004 (first entry)

XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:180.

XX chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.


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XX PD 08-APR-2004.
XX FT
XX PF 25-SEP-2003; 2003WO-US030374.
XX FT
XX PR 25-SEP-2002; 2002US-0413549P.
XX FT
XX PA (PHAA ) PHARMACIA CORP.
XX FT
XX FI Gierse JK;
XX FT
XX DR WPI; 2004-305094/28.
XX FT
XX PT New antisense compound, having a sequence targeted to a nucleic acid
XX FT encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX FT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX FT ischemia.
XX FT
XX PS Claim 4; SEQ ID NO 180; 132pp; English.
XX FT
XX CC The present sequence represents a chimeric antisense oligonucleotide
XX CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX CC human mPGES-1 gene is located on chromosome 9, more specifically to
XX CC 9q34.3. The present invention also describes: (1) antisense compounds,
XX CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX CC inhibits its expression; (2) a method of inhibiting the expression of
XX CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX CC antisense oligonucleotides and antisense compounds have cytostatic,
XX CC antidiabetic, immunomodulator, cardiant, neuroprotective,
XX CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX CC ophthalmological, immunomodulatory and cardiovascular activities, and can
XX CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX CC can be used for preparing a composition for treating a disease or
XX CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 605
ADM13998/c
ID ADM13998 standard; DNA; 20 BP.
XX
XX AC ADM13998;
XX
XX DT 01-JUL-2004 (first entry)
XX
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:185.
XX
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;
XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX KW reperfusion injury; ophthalmic disorder; immunological disorder;
XX KW cardiovascular disorder; neurological disorder; ss.
XX
XX OS Homo sapiens.
XX XX Synthetic.

```

```

FH Key modified_base Location/Qualifiers
FT 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX WO2004028458-A2.
XX
XX PD 08-APR-2004.
XX
XX PF 25-SEP-2003; 2003WO-US030374.
XX
XX PR 25-SEP-2002; 2002US-0413549P.
XX
XX PA (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX PS Claim 4; SEQ ID NO 185; 132pp; English.
XX
XX CC The present sequence represents a chimeric antisense oligonucleotide
XX CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX CC human mPGES-1 gene is located on chromosome 9, more specifically to
XX CC 9q34.3. The present invention also describes: (1) antisense compounds,
XX CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX CC mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX CC inhibits its expression; (2) a method of inhibiting the expression of
XX CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX CC antisense oligonucleotides and antisense compounds have cytostatic,
XX CC antidiabetic, immunomodulator, cardiant, neuroprotective,
XX CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX CC ophthalmological, immunomodulatory and cardiovascular activities, and can
XX CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX CC can be used for preparing a composition for treating a disease or
XX CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 606
ADM14007/c
ID ADM14007 standard; DNA; 20 BP.
XX
XX AC ADM14007;
XX
XX DT 01-JUL-2004 (first entry)

```

XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:194.
XX
KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsome prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsome prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; neurotropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulator; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
PN WO2004028458-A2.
XX
XX
PD 08-APR-2004.
XX
XX
PF 25-SEP-2003; 2003WO-US030374.
XX
XX
PR 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 194; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsome prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytosolic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, neurotropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
|||||||
RESULT 607
ADM14124/c
ID ADM14124 standard; DNA; 20 BP.
XX
XX AC ADM14124;
XX
XX DT 01-JUL-2004 (first entry)
XX
XX DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:311.
XX
XX KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsome prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsome prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; neurotropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
XX OS Homo sapiens.
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX
XX PN WO2004028458-A2.
XX
XX PD 08-APR-2004.
XX
XX PF 25-SEP-2003; 2003WO-US030374.
XX
XX PR 25-SEP-2002; 2002US-0413549P.
XX (PHAA) PHARMACIA CORP.
XX
XX PI Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 311; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsome prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytosolic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, neurotropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

CC mpGES-1, which specifically hybridise with the nucleic acid mpGES-1 and
 CC inhibits its expression; (2) a method of inhibiting the expression of
 CC mpGES-1 in cells or tissues; and (3) a method of treating an animal
 CC having a disease or condition associated with mpGES-1. mpGES-1 chimeric
 CC antisense oligonucleotides and antisense compounds have cytostatic,
 CC antiinflammatory, immunomodulatory, cardiant, neuroprotective,
 CC ophthalmological, neuroprotective, nootropic, antiarthritic, vasotropic,
 CC can be used as mpGES-1 inhibitors and in gene therapy. The antisense compound
 CC can be used for preparing a composition for treating a disease or
 CC condition associated with mpGES-1 e.g., inflammation, Alzheimer's
 CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 CC ophthalmic, immunological, cardiovascular or neurological disorder.
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 608

ADM14216/C

ID ADM14216 standard; DNA; 20 BP.

AC ADM14216;

DT 01-JUL-2004 (first entry)

DE Human mpGES-1 chimeric antisense oligonucleotide SEQ ID NO:403.

KW chimeric; antisense oligonucleotide; phosphorothioate; human;
 KW microsomal prostaglandin E2 synthase; mpGES-1; mpGES-1 inhibitor;
 KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
 KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
 KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
 KW immunomodulatory; cardiovascular; gene therapy; inflammation;
 KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
 KW reperfusion injury; ophthalmic disorder; immunological disorder;
 KW cardiovascular disorder; neurological disorder; ss.

OS Homo sapiens.

OS Synthetic.

FH Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= b

FT /mod_base= OTHER

 FT /note= "phosphorothioate linkages and all cytidine
 FT residues are 5-methylcytidines"

FT modified_base 1..5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

XX WO2004028458-A2.

PN 08-APR-2004.

PD 25-SEP-2003; 2003WO-US030374.

XX 25-SEP-2002; 2002US-0413549P.

XX (PHAA) PHARMACIA CORP.

XX

PI Gierse JK;

DR WPI; 2004-305094/28.

XX

XX New antisense compound, having a sequence targeted to a nucleic acid
 XX encoding mpGES-1, useful for preparing a composition for treating e.g.,
 XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
 XX ischaemia.

PS Claim 4; SEQ ID NO 403; 132pp; English.

XX

XX The present sequence represents a chimeric antisense oligonucleotide
 XX targeted to human microsomal prostaglandin E2 synthase (mpGES-1). The
 XX human mpGES-1 gene is located on chromosome 9, more specifically to
 XX 9q34.3. The present invention also describes: (1) antisense compounds,
 XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
 XX mpGES-1, which specifically hybridise with the nucleic acid mpGES-1 and
 XX inhibits its expression; (2) a method of inhibiting the expression of
 XX mpGES-1 in cells or tissues; and (3) a method of treating an animal
 XX having a disease or condition associated with mpGES-1. mpGES-1 chimeric
 XX antisense oligonucleotides and antisense compounds have cytostatic,
 XX antidiabetic, immunomodulatory, cardiant, neuroprotective,
 XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
 XX ophthalmological, immunomodulatory and cardiovascular activities, and can
 XX be used as mpGES-1 inhibitors and in gene therapy. The antisense compound
 XX can be used for preparing a composition for treating a disease or
 XX condition associated with mpGES-1 e.g., inflammation, Alzheimer's
 XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
 XX ophthalmic, immunological, cardiovascular or neurological disorder.

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.7%; Score 20; DB 1; Length 20;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 609

ADO03711

ID ADO03711 standard; DNA; 20 BP.

XX

AC ADO03711;

XX

DT 29-JUL-2004 (first entry)

XX

DE SERS-based analyte detection oligonucleotide seqid 31.

* XX Raman label; specific binding member; surface-enhanced Raman scattering;
 XX SERS; ss.

XX Synthetic.

XX US2004086897-A1.

XX

XX 06-MAY-2004.

XX

XX 07-MAY-2003; 2003US-00431341.

XX

XX 07-MAY-2002; 2002US-0378538P.

XX 28-MAY-2002; 2002US-0383630P.

XX 14-JUN-2002; 2002US-00172428.

XX

XX (MIRK/) MIRKIN C A.

XX (CAOY/) CAO Y.

XX (JINR/) JIN R.

XX

PI Mirkin CA, Cao Y, Jin R;

XX WPI; 2004-418413/39.

XX

XX Reagent, useful for detecting target analyte e.g., nucleic acid.
PT comprising particle having bound to at least one Raman label, which can
PT be activated to provide surface-enhanced Raman scattering effect, and
PT specific binding member.
XX
XX Disclosure; SEQ ID NO 31; 55pp; English.
XX
XX The invention describes a reagent (I) comprising a particle bound to at
CC least one Raman label and a specific binding member, where the Raman
CC label can be activated to provide a surface-enhanced Raman scattering
CC (SERS) effect or comprising a specific binding member having two or more
CC different Raman labels bound to it. Also described are: a test kit (II),
CC comprising (I) in one container and a silver, gold or copper Raman
CC enhancer stain in another container; and a fibre optic detection device
CC (III), having a bundle of optical fibres terminating with ends of the
CC optical fibre, where a several of the optical fibres have (I) located at
CC the ends of the optical fibre. (I) is useful for: detecting for the
CC presence or absence of one or more target analytes in a sample, the
CC target analytes having at least two binding sites; detecting the presence
CC or absence of one or more target nucleic acid in a sample, the sequence
CC of the nucleic acid having at least two portions; and for screening one
CC or more molecules to determine whether the molecule is a ligand to one or
CC more specific receptors. This sequence represents an oligonucleotide
CC associated with the SERS-based detection analyte detection method.
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
|||||

RESULT 610
ADP20152
ID ADP20152 standard; DNA; 20 BP.
XX
XX ADP20152;
XX
XX 26-AUG-2004 (first entry)
XX
XX Nucleic acid detection method linking oligonucleotide #66.
XX
XX Nucleic acid detection; nanoparticle-oligonucleotide conjugate;
KW genetic disease; bacterial infection; viral infection; forensic;
KW DNA sequencing; paternity testing; linking oligonucleotide; ss.
XX
XX Synthetic.
XX
XX US2004110220-A1.
XX
XX 10-JUN-2004.
XX
XX 18-NOV-2003; 2003US-00716829.
XX
XX 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 25-JUN-1999; 99US-00344667.
PR 13-JAN-2000; 2000US-0176409P.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
PR 26-JUN-2000; 2000US-0213906P.
PR 12-JAN-2001; 2001US-00760500.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
PI Taton TA, Garimella V, Li Z;

XX WPI; 2004-440357/41.
DR
XX Nanoparticles useful for detection and separation of nucleic acids e.g.
PT genes associated with disease, in a diagnostic assay, comprise several
PT oligonucleotides attached to them.
XX
XX Example 24; SEQ ID NO 70; 142pp; English.
XX
XX The invention relates to a method of detecting a nucleic acid with at
CC least two portions by providing a type of nanoparticle-oligonucleotide
CC conjugate, contacting the nucleic acid and nanoparticles to allow
CC hybridisation of the oligonucleotides with the two or more portions of
CC the nucleic acid and observing a detectable change brought about by
CC hybridisation. The oligonucleotides have a sequence complementary to the
CC sequence of at least two portions of the nucleic acid. Hybridisation of
CC the oligonucleotides on the nanoparticles with the nucleic acid results
CC in a detectable change. The method is used for detection and separation
CC of nucleic acids (e.g. viral DNA, a gene associated with a disease,
CC bacterial DNA, fungal DNA, synthetic DNA, structurally-modified DNA, DNA
CC from biological sources or PCR products) for diagnosis of various
CC diseases (such as genetic diseases, bacterial infections and viral
CC infections) and for forensics, DNA sequencing, paternity testing and
CC monitoring gene therapy. This sequence represents a linking
CC oligonucleotide of the invention.
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
|||||

RESULT 611
ADP20137
ID ADP20137 standard; DNA; 20 BP.
XX
XX ADP20137;
XX
XX 26-AUG-2004 (first entry)
XX
XX Nucleic acid detection method linking oligonucleotide #54.
XX
XX Nucleic acid detection; nanoparticle-oligonucleotide conjugate;
KW genetic disease; bacterial infection; viral infection; forensic;
KW DNA sequencing; paternity testing; linking oligonucleotide; ss.
XX
XX Synthetic.
XX
XX US2004110220-A1.
XX
XX 10-JUN-2004.
XX
XX 18-NOV-2003; 2003US-00716829.
XX
XX 29-JUL-1996; 96US-0031809P.
PR 21-JUL-1997; 97WO-US012783.
PR 29-JAN-1999; 99US-00240755.
PR 25-JUN-1999; 99US-00344667.
PR 13-JAN-2000; 2000US-0176409P.
PR 26-APR-2000; 2000US-0200161P.
PR 26-JUN-2000; 2000US-00603830.
PR 26-JUN-2000; 2000US-0213906P.
PR 12-JAN-2001; 2001US-00760500.
XX
XX (NANO-) NANOSPHERE INC.
XX
XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;
PI Taton TA, Garimella V, Li Z;

```

XX DR WPI; 2004-440357/41.
XX PT Nanoparticles useful for detection and separation of nucleic acids e.g.
XX PT genes associated with disease, in a diagnostic assay, comprise several
XX PT oligonucleotides attached to them.
XX PS Example 18; SEQ ID NO 55; 142pp; English.
XX CC The invention relates to a method of detecting a nucleic acid with at
XX CC least two portions by providing a type of nanoparticle-oligonucleotide
XX CC conjugate, contacting the nucleic acid and nanoparticles to allow
XX CC hybridisation of the oligonucleotides with the two or more portions of
XX CC the nucleic acid and observing a detectable change brought about by
XX CC hybridisation. The oligonucleotides have a sequence complementary to the
XX CC sequence of at least two portions of the nucleic acid. Hybridisation of
XX CC the oligonucleotides on the nanoparticles with the nucleic acid results
XX CC in a detectable change. The method is used for detection and separation
XX CC of nucleic acids (e.g. viral DNA, a gene associated with a disease,
XX CC bacterial DNA, fungal DNA, synthetic DNA, structurally-modified DNA, DNA
XX CC from biological sources or PCR products) for diagnosis of various
XX CC diseases (such as genetic diseases, bacterial infections and viral
XX CC infections) and for forensics. DNA sequencing, paternity testing and
XX CC monitoring gene therapy. This sequence represents a linking
XX CC oligonucleotide of the invention.
XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 612
ADP99303/C
ID ADP99303 standard; DNA; 20 BP.
AC ADP99303;
XX 23-SEP-2004 (first entry)
DE Stem cell factor, SCF, universal PCR primer #3.
XX SCF; stem cell factor; gene therapy; haematopoietic progenitor cell;
XX aplastic anaemia; paroxysmal nocturnal haemoglobinuria; myelofibrosis;
XX myelosclerosis; osteopetrosis; metastatic carcinoma; acute leukaemia;
XX multiple myeloma; Hodgkin's disease; lymphoma; Gaucher's disease;
XX Niemann-Pick disease; Letterer-Siwe disease;
XX refractory erythroblastic anaemia; Di Guglielmo syndrome;
XX congestive splenomegaly; Kala awar; sarcoidosis;
XX primary splenic pancytopenia; miliary tuberculosis;
XX disseminated fungus disease; Fulminating septicaemia; malaria;
XX vitamin B12 deficiency; folic acid deficiency; pyridoxine deficiency;
XX Diamond Blackfan anaemia; hypopigmentation disorder; piebaldism;
XX vitiligo; neurological damage; infertility; intestinal damage;
XX irradiation; chemotherapy; AIDS; haematopoietic recovery;
XX acute blood loss; neoplasm; cancer; ss; PCR; primer.
XX OS Mammalia.
XX US6759215-B1.
XX 06-JUL-2004.
XX 07-AUG-2000; 2000US-00635251.
XX 16-OCT-1989; 89US-00422383.
XX 11-JUN-1990; 90US-00537198.
XX 24-AUG-1990; 90US-00573616.

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PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449182.
XX (AMGE-) AMGEN INC.
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2004-497128/47.
XX Preparing a human stem cell factor (SCF) polypeptide, useful for treating
XX PT hematopoietic disorders, e.g., aplastic anemia, comprises growing host
XX PT cells transformed or transfected with DNA encoding a human SCF.
XX PS Example 3; SEQ ID NO 33; 210pp; English.
XX CC The invention relates to preparing a (vertebrate) human stem cell factor
XX CC (SCF) polypeptide comprising growing host cells transformed or
XX CC transfected with DNA encoding a human SCF that stimulates growth of
XX CC haematopoietic progenitor cells under nutrient conditions, the DNA being
XX CC operatively linked to an expression control sequence, and isolating the
XX CC polypeptide produced. Also included is a recombinant host cell
XX CC transformed or transfected with an expression construct comprising a
XX CC vertebrate SCF polypeptide-encoding DNA operatively linked to a
XX CC heterologous expression regulatory sequence, permitting the expression of
XX CC the vertebrate SCF polypeptide in the host cell. Disclosed as new are rat
XX CC and human nucleic acids encoding SCF, SCF proteins from a number of other
XX CC mammals and recombinantly expressed SCF protein fragments. The DNA
XX CC sequences are useful for effecting the large scale synthesis of SCF by a
XX CC variety of recombinant techniques or for generating new and useful viral
XX CC and circular plasmid DNA vectors, new and useful transformed and
XX CC transfected prokaryotic and eukaryotic host cells, and new and useful
XX CC methods for cultured growth of such host cells capable of expression of
XX CC SCF and its related products. The DNA sequences are also useful as
XX CC labelled probes in isolating human genomic DNA encoding SCF, in methods
XX CC of protein synthesis, in genetic therapy in humans and other mammals, and
XX CC in developing transgenic mammalian species which may serve as eukaryotic
XX CC hosts for production of SCF and SCF products in quantity. The SCF is
XX CC useful for treating haematopoietic disorders, e.g., aplastic anaemia,
XX CC paroxysmal nocturnal haemoglobinuria, myelofibrosis, myelosclerosis,
XX CC osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma,
XX CC Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease,
XX CC Letterer-Siwe disease, refractory erythroblastic anaemia, Di Guglielmo
XX CC syndrome, congestive splenomegaly, Kala awar, sarcoidosis, primary
XX CC splenic pancytopenia, miliary tuberculosis, disseminated fungus disease,
XX CC Fulminating septicaemia, malaria, vitamin B 12 and folic acid deficiency,
XX CC pyridoxine deficiency, Diamond Blackfan anaemia, and hypopigmentation
XX CC disorders such as piebaldism and vitiligo. The SCF are also useful for
XX CC treating neurological damage, infertility states, intestinal damage
XX CC resulting from irradiation or chemotherapy, and AIDS. SCF is also useful
XX CC for enhancing haematopoietic recovery after acute blood loss and as a
XX CC boost to the immune system for fighting neoplasia (cancer). The present
XX CC sequence is a universal SCF PCR primer used in the isolation of SCF DNA.
XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2707 CTAATAAAAAAAAAAAAAAAAA 2726
Db 20 CTAATAAAAAAAAAAAAAAAAA 1
RESULT 613
ADR69805
ID ADR69805 standard; DNA; 20 BP.
XX AC ADR69805;
XX ADR69805;

```

DT 02-DEC-2004 (first entry)
XX
DE Micro-channel molecule isolation related Adenine oligo.
XX
KW molecule isolation; micro-channel; molecular weight; micro flow path;
KW polymer compound; flow behaviour; non turbulent flow; ss.
XX Unidentified.
OS
XX WO2004076038-A1.
PN
XX
XX 10-SEP-2004.
PD
XX
PF 18-FEB-2004; 2004WO-JP001814.
XX
XX 18-FEB-2003; 2003JP-00039870.
PR
XX (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
PA
XX Yamaehita K, Maeda H, Shimizu H, Miyazaki M, Nakamura H;
PI Yamauchi Y;
PI
XX WPI; 2004-661906/64.
DR
XX Isolating molecules e.g., DNA, by introducing solution with two types of
PT solute molecules into micro flow path to form non turbulent flow,
PT providing physical action to molecule causing difference in flow
PT behavior, separating molecules.
PT
XX Example 3; Page 7; 19pp; Japanese.
PS
XX The invention relates to a novel method for isolating molecules using a
XX micro-channel. The molecules are isolated by introducing a mixed solution
CC having two types of solute molecules differing in molecular weight into a
CC micro flow path, to form a non turbulent flow, and providing physical
CC action to the molecules by changing the flow state, thus causing
CC different behaviours among different solute molecules, where the
CC different behaviour enables uneven distribution of specific kinds of
CC molecules in the flow path, causing separation of the molecules. The
CC invention further comprises: molecule separation apparatus, comprising a
CC substrate with a micro flow path, having one or more curved portions, a
CC sample intake unit at one side and a sample removal opening at the other
CC side, and a physical property detection sensor arranged inside the curved
CC portion or outside the curved portion. The method is useful for isolating
CC molecules, e.g. polymer compounds, DNA or proteins. The method enables
CC simple and efficient separation of molecules by utilising specific flow
CC behaviour in a non turbulent flow, in a micro flow path, where a large
CC number of samples can be processed. This polynucleotide sequence
CC represents an oligo used in the exemplification of the invention.
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
SQ
Query Match 0.78; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 614
ADU50633/C
ID ADU50633 standard; DNA; 20 BP.
XX
XX AC ADU50633;
XX
XX 13-JAN-2005 (first entry)
DT Human/rat stem cell factor, SCF, primer 220-7.
DE
XX Stem cell factor; SCF; haematopoietic; HT1080 fibrosarcoma cell line;
KW 5637 bladder carcinoma cell line; leukopaemia; thrombocytopaenia;
KW

anaemia; bone marrow during transplant; bone marrow aplasia;
myelosuppression; immune deficiency; neoplasm; nerve damage; infertility;
intestinal damage; myeloproliferative disorder;
early haematopoietic progenitor cell; haematopoietic disorders;
aplastic anaemia; myelofibrosis; myelosclerosis; osteopetrosis;
metastatic carcinoma; multiple myeloma; Hodgkin's disease; lymphoma;
Gaucher's disease; Niemann-Pick disease; Diamond-Blackfan anaemia; DBA;
Fanconi's anaemia; gene therapy; acute blood loss; ss; PCR; primer;
probe.
XX
XX Homo sapiens.
OS
OS Rattus norvegicus.
XX
XX US2004181044-A1.
PN
XX 16-SEP-2004.
PD
XX
XX 19-JUN-2002; 2002US-00175608.
PF
XX 16-OCT-1989; 89US-00422383.
PR
XX 11-JUN-1990; 90US-00537198.
PR
XX 24-AUG-1990; 90US-00573616.
PR
XX 01-OCT-1990; 90US-00589701.
PR
XX 10-APR-1991; 91US-00684535.
PR
XX 25-NOV-1992; 92US-00982255.
PR
XX 21-DEC-1993; 93US-00172329.
PR
XX 07-JUN-1995; 95US-00486546.
PR
XX 07-AUG-2000; 2000US-00635249.
PR
XX (ZSEB/) ZSEBO K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI
XX WPI; 2004-707481/69.
DR
XX Novel stem cell factor (SCF) such as non-naturally-occurring SCF or
PT naturally occurring SCF, useful for treating leukopenia,
PT thrombocytopenia, anemia, and enhancing engraftment of bone marrow during
PT transplantation.
XX
XX Example 3; SEQ ID NO 33; 216pp; English.
PS
XX The invention relates to a stem cell factor (SCF) such as non-naturally-
CC occurring SCF having an amino acid sequence sufficiently duplicative of
CC that of naturally occurring SCF to allow possession of a haematopoietic
CC biological activity of naturally occurring stem cell factor, or naturally
CC occurring SCF. Also included are an isolated DNA sequence for use in
CC securing expression in a prokaryotic or eukaryotic host cell of non-
CC naturally occurring SCF, a prokaryotic or eukaryotic host cell
CC transformed or transfected with the DNA, a polypeptide product of the
CC expression of the DNA in a prokaryotic or eukaryotic host cell, an
CC isolated DNA sequence coding for prokaryotic or eukaryotic host
CC expression of non-naturally occurring SCF, a DNA sequence coding for a
CC polypeptide fragment or polypeptide analogue of naturally-occurring stem
CC cell factor, a biologically functional plasmid or viral DNA vector
CC including the DNA sequence above, a prokaryotic or eukaryotic host cell
CC stably transformed or transfected with the DNA, a polypeptide having part
CC or all of amino acid sequence encoded by composite nucleic acid sequence
CC of human SCF cDNA, human SCF cDNA sequence obtained from HT1080
CC fibrosarcoma cell line, or human SCF cDNA obtained from 5637 bladder
CC carcinoma cell line (and having one or more of in vitro biological
CC activity of naturally-occurring stem cell factor, and an antibody (Ab)
CC specifically binding SCF. SCF is useful for treating leukopaemia,
CC thrombocytopaenia, anaemia, and enhancing engraftment of bone marrow
CC during transplantation in a mammal. SCF is useful enhancing bone marrow
CC recovery in treatment of radiation, chemical, or chemotherapeutic induced
CC bone marrow aplasia or myelosuppression which involves treating patients
CC with therapeutically effective doses of SCF. SCF is useful for treating
CC acquired immune deficiency, neoplasia, nerve damage, infertility,
CC intestinal damage, and a myeloproliferative disorder. SCF is useful for

CC transfecting early haematopoietic progenitor cells with a gene which
 CC involves culturing early haematopoietic progenitor cells with SCF, and
 CC transfecting the cultured cells with a gene. SCF is useful for
 CC haematopoietic progenitor cells which involves culturing early
 CC haematopoietic progenitor cells with SCF, transfecting the cultured cells
 CC with a gene, and administering the cultured cell to the mammal. SCF is
 CC useful for treating various haematopoietic disorders, aplastic anaemia,
 CC myelofibrosis, myelocytosis, osteopetrosis, metastatic carcinoma, acute
 CC leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, Gaucher's
 CC disease, Niemann-Pick disease, Diamond-Blackfan anaemia (DBA), Fanconi's
 CC anaemia. SCF is useful for enhancing the efficiency of gene therapy, for
 CC enhancing haematopoietic recovery after acute blood loss. The present
 CC sequence is a primer and/or probe used in the isolation of SCF nucleic
 CC acids.

XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 20 CTAATAAAAAAAAAAAAAAAAAA 1

RESULT 615

ADU17674
 ID ADU17674 standard; DNA; 20 BP.

AC ADU17674;

XX 27-JAN-2005 (first entry)

XX Thiol-modified oligo (SA20) to form oligo-nanoparticle conjugates.

XX Nucleic acid detection; genetic disease; cystic fibrosis;
 KW Duchenne muscular dystrophy; sickle cell anaemia; phenylketonuria;
 KW bacterial disease; tuberculosis; Lyme disease; viral disease;
 KW microbial infection; sexually transmitted disease; gonorrhoea; forensics;
 KW DNA sequencing; paternity testing; cell line authentication;
 KW gene therapy; ss.

XX Unidentified.

XX Key Location/Qualifiers
 FH modified_base 1
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Linked to hexythiol group"

XX US2004219520-A1.

XX 04-NOV-2004.

XX 12-OCT-2001; 2001US-00976900.

XX 29-JUL-1996; 96US-0031809P.

XX 21-JUL-1997; 97WO-US012783.

XX 29-JAN-1999; 99US-00240755.

XX 25-JUN-1999; 99US-00344667.

XX 26-APR-2000; 2000US-0200161P.

XX 26-JUN-2000; 2000US-00603830.

XX (NANO-) NANOSPHERE INC.

XX Mirkin CA, Letsinger RL, Mucic RC, Storhoff JU, Elghanian R;

XX Taton TA;

XX WPI; 2004-783783/77.

XX Detection of nucleic acid by contacting nucleic acid with substrate
 PT including oligonucleotides, contacting nucleic acid bound to substrate

PT with nanoparticles comprising oligonucleotides, and detecting change in
 PT conductivity.

XX Example 18; SEQ ID NO 55; 110pp; English.

XX The present invention provides methods of detecting nucleic acids. The
 CC method of the invention comprises contacting a nucleic acid with a
 CC substrate including oligonucleotides under conditions to allow
 CC hybridisation of oligonucleotides on the substrate, contacting nucleic
 CC acid bound to the substrate with nanoparticles comprising
 CC oligonucleotides under hybridisation conditions and detecting change in
 CC conductivity. The invention is useful for detecting nucleic acids for the
 CC diagnosis of genetic diseases such as cystic fibrosis, Duchenne muscular
 CC dystrophy, sickle cell anaemia and phenylketonuria, bacterial diseases
 CC such as tuberculosis, Lyme disease, Helicobacter pylori infections,
 CC Escherichia coli infections, Legionella infections, Mycoplasma infections
 CC and Salmonella infections, viral diseases such as human immunodeficiency
 CC disease virus (HIV), hepatitis virus, herpes virus, cytomegalovirus and
 CC Epstein-Barr virus, sexually transmitted disease such as gonorrhoea. The
 CC invention is also useful in forensics, DNA sequencing, paternity testing,
 CC cell line authentication and gene therapy. The present sequence is a
 CC thiol-modified oligonucleotide used in the formation of oligonucleotide-
 CC nanoparticle conjugates. This oligonucleotide is used to detect the
 CC effect of coadsorbed diluent oligonucleotides.

XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAA 20

RESULT 616

ADU89876

ID ADU89876 standard; DNA; 20 BP.

AC ADU89876;

XX 10-FEB-2005 (first entry)

XX Allergic response suppressor oligonucleotide #560.

XX ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
 KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
 KW immunostimulator; asthma; rhinitis; urticaria; dermatitis;
 KW bacterial infection; viral infection.

XX Synthetic.

XX US2004235774-A1.

XX 25-NOV-2004.

XX 23-APR-2004; 2004US-00831778.

XX 03-FEB-2000; 2000US-0179991P.

XX 02-FEB-2001; 2001US-00776479.

XX (BRAT/) BRATZLER R L.

XX (PETE/) PETERSEN D M.

XX (FOUR/) FOURON Y.

XX Bratzler RL, Petersen DM, Fouron Y;

XX WPI; 2004-833006/82.

XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic
 PT dermatitis, in a subject, comprises administering a first and second dose
 PT of an immunostimulatory nucleic acid.

XX Disclosure; SEQ ID NO 560; 235pp; English.

XX The invention relates to a method of suppressing a symptom of an allergic response in a subject by administering a first and second dose of an immunostimulatory nucleic acid that comprises a nucleotide sequence comprising 5'-cg-3', and where the second dose is administered from 1 day to 8 weeks after the first dose. The methods and compositions of the present invention are useful for the treatment or prevention of asthma and allergy, including rhinitis, urticaria and atopic dermatitis, using an immunostimulatory nucleic acid alone or in combination with other medicaments. They can also be used in preventing bacterial and viral infections. This sequence represents an oligonucleotide used in the method of the invention.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02; Indels 0; Gaps 0;
 Matches 20; Conservative 0; Mismatches 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 617
 ADU89872/c
 ID ADU89872 standard; DNA; 20 BP.
 XX
 AC ADU89872;
 XX
 DT 10-FEB-2005 (first entry)
 XX
 DE Allergic response suppressor oligonucleotide #556.
 XX
 KW ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
 KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
 KW immunostimulatory; asthma; rhinitis; urticaria; dermatitis;
 KW bacterial infection; viral infection.
 XX
 OS Synthetic.
 XX
 PN US2004235774-A1.
 XX
 PD 25-NOV-2004.
 XX
 PF 23-APR-2004; 2004US-00831778.
 XX
 PR 03-FEB-2000; 2000US-0179991P.
 PR 02-FEB-2001; 2001US-00776479.
 XX
 PA (BRAT/) BRATZLER R L.
 PA (PETE/) PETERSEN D M.
 PA (FOUR/) FOURON Y.
 XX
 XX Bratzler RL, Petersen DM, Fouron Y;
 XX WPI; 2004-833006/82.
 XX
 XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic dermatitis, in a subject, comprises administering a first and second dose of an immunostimulatory nucleic acid.
 XX
 PS Disclosure; SEQ ID NO 556; 235pp; English.
 XX
 XX The invention relates to a method of suppressing a symptom of an allergic response in a subject by administering a first and second dose of an immunostimulatory nucleic acid that comprises a nucleotide sequence comprising 5'-cg-3', and where the second dose is administered from 1 day to 8 weeks after the first dose. The methods and compositions of the present invention are useful for the treatment or prevention of asthma and allergy, including rhinitis, urticaria and atopic dermatitis, using

CC an immunostimulatory nucleic acid alone or in combination with other medicaments. They can also be used in preventing bacterial and viral infections. This sequence represents an oligonucleotide used in the method of the invention.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02; Indels 0; Gaps 0;
 Matches 20; Conservative 0; Mismatches 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 618
 ADU89542/c
 ID ADU89542 standard; DNA; 20 BP.
 XX
 AC ADU89542;
 XX
 DT 10-FEB-2005 (first entry)
 XX
 DE Allergic response suppressor oligonucleotide #226.
 XX
 KW ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
 KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
 KW immunostimulatory; asthma; rhinitis; urticaria; dermatitis;
 KW bacterial infection; viral infection.
 XX
 OS Synthetic.
 XX
 PN US2004235774-A1.
 XX
 PD 25-NOV-2004.
 XX
 PF 23-APR-2004; 2004US-00831778.
 XX
 PR 03-FEB-2000; 2000US-0179991P.
 PR 02-FEB-2001; 2001US-00776479.
 XX
 PA (BRAT/) BRATZLER R L.
 PA (PETE/) PETERSEN D M.
 PA (FOUR/) FOURON Y.
 XX
 XX Bratzler RL, Petersen DM, Fouron Y;
 XX WPI; 2004-833006/82.
 XX
 XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic dermatitis, in a subject, comprises administering a first and second dose of an immunostimulatory nucleic acid.
 XX
 PS Disclosure; SEQ ID NO 226; 235pp; English.
 XX
 XX The invention relates to a method of suppressing a symptom of an allergic response in a subject by administering a first and second dose of an immunostimulatory nucleic acid that comprises a nucleotide sequence comprising 5'-cg-3', and where the second dose is administered from 1 day to 8 weeks after the first dose. The methods and compositions of the present invention are useful for the treatment or prevention of asthma and allergy, including rhinitis, urticaria and atopic dermatitis, using an immunostimulatory nucleic acid alone or in combination with other medicaments. They can also be used in preventing bacterial and viral infections. This sequence represents an oligonucleotide used in the method of the invention.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02; Indels 0; Gaps 0;
 Matches 20; Conservative 0; Mismatches 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 619
 ACL79852/c
 ID ACL79852 standard; DNA; 20 BP.
 XX
 AC ACL79852;
 XX
 DT 16-JUN-2005 (first entry)
 XX
 DE Oligo (dT)20 reverse transcription primer, SEQ:7389.
 XX
 KW Vaccine; nucleic acid vaccine; drug screening; diagnosis;
 KW SARS coronavirus infection; infection; respiratory disease; virucide;
 KW primer; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004092360-A2.
 XX
 PD 28-OCT-2004.
 XX
 PF 09-APR-2004; 2004WO-US011710.
 XX
 PR 10-APR-2003; 2003US-0462218P.
 PR 11-APR-2003; 2003US-046245P.
 PR 12-APR-2003; 2003US-0462418P.
 PR 13-APR-2003; 2003US-0462748P.
 PR 14-APR-2003; 2003US-0463109P.
 PR 15-APR-2003; 2003US-0463460P.
 PR 16-APR-2003; 2003US-0463668P.
 PR 17-APR-2003; 2003US-0463983P.
 PR 18-APR-2003; 2003US-0463971P.
 PR 22-APR-2003; 2003US-0464838P.
 PR 23-APR-2003; 2003US-0464899P.
 PR 24-APR-2003; 2003US-0465273P.
 PR 05-MAY-2003; 2003US-0465535P.
 PR 22-MAY-2003; 2003US-0468312P.
 PR 14-AUG-2003; 2003US-0473144P.
 PR 23-SEP-2003; 2003US-0505652P.
 PR 11-OCT-2003; 2003US-0510781P.
 PR 11-DEC-2003; 2003US-0529464P.
 PR 12-JAN-2004; 2004US-0536177P.
 PR 07-APR-2004; 2004US-0560757P.
 XX
 PA (CHIR) CHIRON CORP.
 XX
 PI Rappuoli R, Masignani V, Stadler K, Gregersen J, Chien D, Han J;
 PI Polo J, Weiner A, Houghton M, Song HC, Seo MY, Donnelly JJ;
 PI Klenk HD, Valliante N;
 XX
 DR WPI; 2004-766863/75.
 XX
 XX Novel isolated polypeptide e.g. spike polypeptide, Env polypeptide, of
 PT severe acute respiratory syndrome virus (SARS), useful as vaccine for
 PT SARS.
 XX
 XX Example 1; SEQ ID NO 7389; 839pp; English.
 XX
 CC The invention relates to isolated polypeptides of the severe acute
 CC respiratory syndrome (SARS) coronavirus. The polypeptides include spike
 CC (S or E2), env (E or sM), membrane (M or E1), hemagglutinin-esterase (HE
 CC or E3), and nucleocapsid (N) polypeptides, and the ORF1a and ORF1ab
 CC (replicase) polypeptides and their proteolytic fragments. The invention
 CC also relates to antibodies which recognise the polypeptides; nucleic
 CC acids encoding the SARS virus polypeptides; primers specific for SARS
 CC virus nucleic acid sequences; kits for amplifying SARS virus target
 CC nucleic acids; a double-stranded RNA molecule 10-30 nucleotides in length

CC which is able to inactivate the SARS virus in a mammalian cell; an
 CC expression construct for recombinant expression of a SARS virus spike
 CC protein; a viral vector for in vivo delivery of a SARS virus polypeptide-
 CC encoding nucleic acid; and a mammalian cell line stably expressing a SARS
 CC viral antigen. The invention additionally provides a vaccine for the
 CC treatment or prevention of SARS comprising an inactivated SARS virus, a
 CC killed SARS virus, an attenuated SARS virus, a split SARS virus
 CC preparation, or at least one purified SARS virus antigens; methods of
 CC making inactivated SARS virus and vaccines containing it; an alpha-virus
 CC replicon particle comprising one or more SARS viral antigens; and a
 CC vaccine comprising one or more SARS virus antigens and one or more
 CC respiratory virus antigens. The invention further encompasses a method of
 CC identifying a therapeutically active agent by measuring the effect of the
 CC agent on a SARS-related enzyme, and a method of treating a SARS patient
 CC using small molecule viral inhibitors. The SARS virus polypeptides and
 CC nucleic acids can be used in the preparation and manufacture of vaccines
 CC for the treatment or prevention of SARS. The SARS virus polypeptides,
 CC antibodies against them, and SARS virus-specific primers and kits
 CC containing them are useful for diagnosing or identifying the presence of
 CC SARS in a biological sample. The present sequence represents a primer for
 CC use in reverse transcription of SARS genomic RNA. Note: The sequence data
 CC for this patent did not form part of the printed specification, but was
 CC obtained in electronic format directly from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7% Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 620

ADU50993

ID ADU50993 standard; DNA; 20 BP.

AC ADU50993;

XX

DT 13-JAN-2005 (first entry)

XX

DE Oligonucleotide of the invention SEQ ID NO:55.

XX ss; hybridization; diagnosis; genetic disorder; bacterial infection;
 XX viral infection.

OS Synthetic.

XX

PN US6812334-B1.

XX

PD 02-NOV-2004.

XX

PF 12-OCT-2001; 2001US-00976618.

XX

PR 29-JUL-1996; 96US-0031809P.

XX

PR 21-JUL-1997; 97WO-US012783.

XX

PR 29-JAN-1999; 99US-00240755.

XX

PR 25-JUN-1999; 99US-00344667.

XX

PR 26-APR-2000; 2000US-0200161P.

XX

PR 26-JUN-2000; 2000US-00603830.

XX

PA (NANO-) NANOSPHERE INC.

XX

PI Mirkin CA, Letsinger RL, Mucic RC, Storhoff JJ, Elghanian R;

XX

PI Taton TA;

XX

XX WPI; 2005-019280/02.

XX

PT Nanoparticle for detecting nucleic acids for diagnosis of genetic,
 PT bacterial, and viral diseases, comprises oligonucleotides containing at

PT least one type of recognition oligonucleotides, each having spacer
PT portion and recognition portion.
XX
PS Example 18; SEQ ID NO 55; 108pp; English.
XX
CC The invention relates to a novel nanoparticle having oligonucleotides
CC attached thereto, comprising at least one type of recognition
CC oligonucleotides, each having a spacer portion bound to the nanoparticle
CC and a recognition portion having a sequence complementary to portion(s)
CC of sequence of nucleic acid or another oligonucleotide. In the presence
CC of nucleic acid or another oligonucleotide and under hybridization
CC conditions, the nanoparticle forms a complex with the nucleic acid or
CC another oligonucleotide. The complex has a sharp melting profile and an
CC increased melting temperature, relative to a melting profile and a
CC melting temperature of an analogous complex formed with the nucleic acid
CC or another oligonucleotide and an unlabeled or fluorophore-labeled
CC oligonucleotide having a sequence identical to the oligonucleotides bound
CC to the nanoparticle, to allow for selective discrimination of nucleotide
CC insertions, deletions, and/or mismatches in the nucleic acid or another
CC oligonucleotide under stringent hybridization conditions. The
CC nanoparticle is a metal, semiconductor, or preferably a gold
CC nanoparticle. The nanoparticles of the invention are useful for detecting
CC nucleic acids for diagnosis of genetic, bacterial, and viral diseases.
CC The nanoparticle is stable at elevated temperature and high salt
CC concentration. The present sequence is used in the exemplification of the
CC invention.
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 621
ADV94811
ID ADV94811 standard; DNA; 20 BP.
XX
AC ADV94811;
XX
XX 10-MAR-2005 (first entry)
XX Human glycosyltransferase pENTR/DTOPo vector 5' primer.
XX
XX glycosyltransferase; N-acetyl-D-galactosamine; GalNAC; screening; ss;
KW PCR; primer.
XX
XX Synthetic.
XX
XX JP2004357635-A.
XX
XX 24-DEC-2004.
XX
XX 06-JUN-2003; 2003JP-00162685.
XX
XX 06-JUN-2003; 2003JP-00162685.
XX
XX (DOKU-) DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.
PA (SEKG) SEIKAGAKU KOGYO CO LTD.
XX
XX WPI; 2005-035730/04.
XX
XX Novel glycosyltransferase capable of transferring N-acetyl-D-
PT galactosamine (GalNAC) residue to GalNAC receptor substrate from GalNAC
PT donor substrate, useful in screening substances that promotes/inhibits
PT glycosyltransferase activity.
XX
PS Example 1; SEQ ID NO 5; 37pp; Japanese.
XX

CC The invention relates to a novel glycosyltransferase capable of
CC transferring an N-acetyl-D-galactosamine (GalNAC) residue to a GalNAC
CC receptor substrate from a GalNAC donor substrate. The glycosyltransferase
CC comprises a polypeptide having sequence ADV94808 containing amino acids
CC 43-601 or 1-601 of a fully defined sequence of 601 amino acids, as given
CC in the specification, or ADV94808 in which one or more amino acids are
CC substituted, deleted, inserted or rearranged. The invention further
CC comprises: a nucleic acid encoding the 601 amino acid glycosyltransferase
CC protein and comprising a sequence ADV94807 having bases 127-1806 or 1-
CC 1806 of a fully defined sequence of 1806 base pairs, as given in the
CC specification, or a sequence complementary to ADV94807; a nucleic acid
CC capable of hybridizing under stringent conditions, with the nucleic acid
CC that consists of the base sequence complementary to the 1806 bp
CC polynucleotide; a vector containing the glycosyltransferase encoding DNA
CC or its complementary sequence; a recombinant containing the vector; an
CC antibody capable of specifically recognizing the glycosyltransferase
CC protein; an active regulator of the glycosyltransferase protein; and a
CC therapeutic agent of the disease caused due to change of activity of the
CC glycosyltransferase, containing an active regulator of the
CC glycosyltransferase protein as an active ingredient. The
CC glycosyltransferase protein is useful in screening substances that
CC promote or inhibit the activity of glycosyltransferase. The
CC glycosyltransferase complementary DNA is useful as a probe for detecting
CC in vivo expression of the glycosyltransferase DNA, and as a reagent or
CC diagnostic for medical studies. The active regulator of the
CC glycosyltransferase protein, is useful as the therapeutic agent for
CC treating the disease caused due to change of activity of the
CC glycosyltransferase protein. The glycosyltransferase protein is capable
CC of transferring GalNAC residue to a GalNAC receptor substrate from a
CC GalNAC donor substrate. This polynucleotide sequence represents a primer
CC used in the exemplification of the invention.
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
RESULT 622
ADW02146
ID ADW02146 standard; DNA; 20 BP.
XX
AC ADW02146;
XX
XX 24-MAR-2005 (first entry)
XX
XX Target RNA detecting detection probe.
XX
XX Gene expression; DNA detection; probe; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1 /*tag= a
FT /mod_base= other
FT /note= "5'-steroid disulfide linker"
XX
XX WO2005001143-A2.
XX
XX 06-JAN-2005.
XX
XX 27-FEB-2004; 2004WO-US006273.
XX
XX 27-FEB-2003; 2003US-0450268P.
XX
XX (NANO-) NANOSPHERE INC.
XX

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BI Bao YP, Mueller UR;
XX WPI; 2005-075590/08.
XX
PT Detecting/quantifying gene expression in a sample of unlabeled target
PT nucleic acids by contacting the sample, a substrate having capture
PT nucleic acid sequences and nanoparticles having bound oligonucleotides
PT for hybridization.
XX
XX Example 1; Page 28; 54pp; English.
XX
XX The invention relates to detecting or quantifying gene expression in a
XX sample having unlabeled target nucleic acids. The method involves
XX providing a substrate having types of capture nucleic acid sequences
XX attached to it in an array for the detection of multiple portions of a
XX target nucleic acid, the detection of multiple different target nucleic
XX acids, or both; providing nanoparticles having oligonucleotides bound to
XX it; the oligonucleotides bound to the nanoparticles having a sequence
XX that is complementary to at least a portion of the oligonucleotide tail;
XX contacting the sample, the substrate, and the nanoparticles, the
XX nucleic acids to the capture nucleic acid sequences bound to the
XX substrate and hybridization of the target nucleic acids to the
XX nanoparticles; and observing a detectable change. The target cDNAs,
XX nanoparticles and substrate are contacted simultaneously under conditions
XX effective for hybridization of the target cDNAs with the oligonucleotides
XX bound to the nanoparticles and with the capture nucleic acid sequences
XX bound to the substrate. The nanoparticles are made of gold. The capture
XX nucleic acid sequences comprise an oligonucleotide, cDNA, or genomic
XX sequence fragment. The method is useful for detecting/quantifying global
XX gene expression in a sample of unlabeled target nucleic acids. The method
XX avoids the problems associated with fluorescent labeling and target
XX amplification. The present sequence represents a detection probe that can
XX be used to detect target RNA sequences. The probe comprise a steroid
XX disulfide linker at the 5'-end followed by a recognition sequence.
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 623
ADW02147/c
XX ID ADW02147 standard; DNA; 20 BP.
XX AC ADW02147;
XX DT 24-MAR-2005 (first entry)
XX DE Target RNA detecting detection probe.
XX KW Gene expression; DNA detection; probe; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX FT /mod_base= other
XX FT /note= "5'-steroid disulfide linker"
XX
XX WO2005001143-A2.
XX
XX 06-JAN-2005.
XX
XX 27-FEB-2004; 2004WO-US006273.
XX

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PR 27-FEB-2003; 2003US-0450268P.
XX (NANO-) NANOSPHERE INC.
XX
XX Bao YP, Mueller UR;
XX WPI; 2005-075590/08.
XX
XX Detecting/quantifying gene expression in a sample of unlabeled target
XX nucleic acids by contacting the sample, a substrate having capture
XX nucleic acid sequences and nanoparticles having bound oligonucleotides
XX for hybridization.
XX
XX Example 1; Page 28; 54pp; English.
XX
XX The invention relates to detecting or quantifying gene expression in a
XX sample having unlabeled target nucleic acids. The method involves
XX providing a substrate having types of capture nucleic acid sequences
XX attached to it in an array for the detection of multiple portions of a
XX target nucleic acid, the detection of multiple different target nucleic
XX acids, or both; providing nanoparticles having oligonucleotides bound to
XX it; the oligonucleotides bound to the nanoparticles having a sequence
XX that is complementary to at least a portion of the oligonucleotide tail;
XX contacting the sample, the substrate, and the nanoparticles, the
XX nucleic acids to the capture nucleic acid sequences bound to the
XX substrate and hybridization of the target nucleic acids to the
XX nanoparticles; and observing a detectable change. The target cDNAs,
XX nanoparticles and substrate are contacted simultaneously under conditions
XX effective for hybridization of the target cDNAs with the oligonucleotides
XX bound to the nanoparticles and with the capture nucleic acid sequences
XX bound to the substrate. The nanoparticles are made of gold. The capture
XX nucleic acid sequences comprise an oligonucleotide, cDNA, or genomic
XX sequence fragment. The method is useful for detecting/quantifying global
XX gene expression in a sample of unlabeled target nucleic acids. The method
XX avoids the problems associated with fluorescent labeling and target
XX amplification. The present sequence represents a detection probe that can
XX be used to detect target RNA sequences. The probe comprise a steroid
XX disulfide linker at the 5'-end followed by a recognition sequence.
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 624
ADV86470/c
XX ID ADV86470 standard; DNA; 20 BP.
XX AC ADV86470;
XX DT 24-MAR-2005 (first entry)
XX DE Fluorophore-labeled biological detection oligonucleotide #3.
XX KW fluorophore; detection; antibody; antigen; avidin; hormone; ss.
XX OS Synthetic.
XX XX US6838244-B1.
XX 04-JAN-2005.
XX
XX 18-MAY-2001; 2001US-00859736.
XX
XX 19-MAY-2000; 2000US-0205452P.
XX

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PA (MONS ) MONSANTO TECHNOLOGY LLC.
XX
XX LI WR, Zhou JS;
XX WPI; 2005-063191/07.
XX
XX Novel oligonucleotide molecule labeled with several fluorophores, useful
XX for detecting biological molecules e.g., antibody, antigen, avidin or
XX protein.
XX
XX Example 1; SEQ ID NO 3; 18pp; English.
XX
XX The invention relates to an oligonucleotide molecule (ON) labeled with
XX several fluorophores of one or more types embedded in its backbone, where
XX one or more of the fluorophores is not located at either the 3' or 5'
XX terminus of ON. ON is useful for sequencing nucleic molecules. ON is
XX useful for detecting biological molecules e.g., antibody, antigen,
XX avidin, protein, peptide, bacteria, virus, blood cell or hormone. ON is
XX capable of providing strong fluorescence signals at different
XX wavelengths. This sequence corresponds to an example of an
XX oligonucleotide of the invention.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 625
ADV86471/c
ID ADV86471 standard; DNA; 20 BP.
XX
XX ADV86471;
XX
XX 24-MAR-2005 (first entry)
XX
XX Fluorophore-labeled biological detection oligonucleotide #4.
XX
XX Fluorophore; detection; antibody; antigen; avidin; hormone; ss.
XX
XX Synthetic.
XX
XX US6838244-B1.
XX
XX 04-JAN-2005.
XX
XX 18-MAY-2001; 2001US-00859736.
XX
XX 19-MAY-2000; 2000US-0205452P.
XX
XX (MONS ) MONSANTO TECHNOLOGY LLC.
XX
XX LI WR, Zhou JS;
XX
XX WPI; 2005-063191/07.
XX
XX Novel oligonucleotide molecule labeled with several fluorophores, useful
XX for detecting biological molecules e.g., antibody, antigen, avidin or
XX protein.
XX
XX Example 1; SEQ ID NO 4; 18pp; English.
XX
XX The invention relates to an oligonucleotide molecule (ON) labeled with
XX several fluorophores of one or more types embedded in its backbone, where
XX one or more of the fluorophores is not located at either the 3' or 5'
XX terminus of ON. ON is useful for sequencing nucleic molecules. ON is
XX useful for detecting biological molecules e.g., antibody, antigen,
XX avidin, protein, peptide, bacteria, virus, blood cell or hormone. ON is
XX capable of providing strong fluorescence signals at different
XX wavelengths. This sequence corresponds to an example of an
XX oligonucleotide of the invention.
XX
XX Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1751 CTGTTTCGTGTACCCAGAGGA 1770
DB 20 CTGTTTCGTGTACCCAGAGGA 1

RESULT 627

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capable of providing strong fluorescence signals at different wavelengths. This sequence corresponds to an example of an oligonucleotide of the invention.

Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 6.8e+02; Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 626

ADV44957/c

ID ADV44957 standard; DNA; 20 BP.

XX ADV44957;

XX 07-APR-2005 (first entry)

XX Human taxane discriminating EST related PCR primer SEQ ID NO 149.

XX PCR; primer; ss; taxane; breast cancer; neoplasm; Cytostatic.

XX Homo sapiens.

XX WO2005003352-A1.

XX 13-JAN-2005.

XX 01-JUL-2004; 2004WO-JP009692.

XX 01-JUL-2003; 2003JP-00270176.

XX (TAIS) TAISHO PHARM CO LTD.

XX (KATO/) KATO K.

XX (NOGU/) NOGUCHI S.

XX Kato K, Noguchi S, Koizumi K;

XX WPI; 2005-101490/11.

XX Discriminating responsiveness of individual to taxanes, by detecting expression of 10 or more genes e.g., U43578, M33882, U12944 in sample derived from individual and determining responsiveness of sample based on detection results.

XX Example 4; SEQ ID NO 149; 121pp; Japanese.

XX The invention relates to a method of discriminating the responsiveness of an individual to taxanes. The method is useful for discriminating the responsiveness of an individual e.g. a breast cancer patient to taxanes, where the sample is a primary breast cancer tissue or local recurrent breast cancer tissue. The method discriminates the responsiveness of a patient with respect to taxane and thus contributes to the treatment of cancer. The present sequence represents a taxane discriminating expressed sequence tag, EST, related DNA.

XX Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 6.8e+02; Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1751 CTGTTTCGTGTACCCAGAGGA 1770

DB 20 CTGTTTCGTGTACCCAGAGGA 1

RESULT 627

ADW93078/c
 ID ADW93078 standard; DNA; 20 BP.
 AC ADW93078;
 XX
 DT 21-APR-2005 (first entry)
 XX
 DE Universal Stem Cell Factor PCR primer 220-7, SEQ ID 33.
 XX
 KW Antianemic; Antimetabolic; Cytostatic; Anti-HIV; Cardiovascular-Gen.;
 KW CNS-Gen.; Antiparasitic; Antibacterial; Immunosuppressive;
 KW Antiinflammatory; Fungicide; Antifertility; AIDS; aplastic anemia;
 KW paroxysmal nocturnal hemoglobinuria; osteopetrosis; acute leukemia;
 KW multiple myeloma; hodgkins disease; lymphoma; gauchers disease;
 KW niemann pick disease; sarcoidosis; plasmmodum infection;
 KW vitamin deficiency; hypopigmentation; vitiligo; infertility;
 KW chronic myelocytic leukemia; cell proliferation; Stem Cell Factor; PCR;
 KW primer; ss.
 XX
 OS Synthetic.
 XX
 XX
 PN US6852313-B1.
 XX
 XX
 PD 08-FEB-2005.
 XX
 XX
 DF 26-JUN-2000; 2000US-00604325.
 XX
 XX 16-OCT-1989; 89US-00422383.
 PR 11-JUN-1990; 90US-00537198.
 PR 24-AUG-1990; 90US-00573616.
 PR 01-OCT-1990; 90US-00589701.
 PR 10-APR-1991; 91US-00684535.
 PR 25-NOV-1992; 92US-00982255.
 PR 21-DEC-1993; 93US-00172329.
 PR 24-MAY-1995; 95US-00449649.
 XX
 XX (ANGE-) AMGEN INC.
 PA
 PI Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
 XX
 XX WPI; 2005-160562/17.
 DR
 XX
 XX
 PT Stimulating proliferation of melanocyte cells in human, involves
 PT administering stem cell factor polypeptide or its biologically active
 PT fragments stimulating growth of melanocyte cells, and optionally carrier,
 PT to human.
 XX
 XX
 PS Example 3; SEQ ID NO 33; 212pp; English.
 XX
 CC The present invention relates to a method (M1) for stimulating
 CC proliferation of melanocyte cells in a human. (M1) involves administering
 CC a Stem Cell Factor (SCF) protein, or its biologically active fragments
 CC that stimulates growth of melanocyte cells, and optionally a carrier to
 CC the human. The SCF is covalently conjugated to a water soluble polymer
 CC e.g. polyethylene glycol. Also, the SCF is co-administered with one or
 CC more other cytokines. SCF is also able to stimulate the growth of
 CC primitive progenitors such as early hematopoietic progenitor cells that
 CC are capable of maturing to erythroid, megakaryocyte, granulocyte,
 CC lymphocyte and macrophage cells, and non-hematopoietic stem cells, such as
 CC neural stem cells and primordial germ stem cells. (M1) is useful in
 CC accelerating bone marrow regeneration, and in augmenting T cell
 CC production. (M1) is useful for treating stem cells disorders that are
 CC characterized by a reduction in functional marrow mass due to toxic,
 CC radiant or immunologic injury. (M1) is useful in treating AIDS,
 CC aplastic anemia, paroxysmal nocturnal hemoglobinuria, myelofibrosis,
 CC myelosclerosis, osteopetrosis, metastatic carcinoma, acute leukemia,
 CC multiple myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, Niemann
 CC -Pick disease, congestive splenomegaly, Kalaazar, sarcoidosis, primary
 CC splenic pancytopenia, disseminated fungus disease, fulminating
 CC septicemia, malaria, vitamin B12 and folic acid deficiency disease,
 CC pyridoxine deficiency disease, and hypopigmentation disorders such as
 CC piebaldism and vitiligo. (M1) is useful in treating infertility states,
 CC intestinal damage resulting from irradiation or chemotherapy, and stem

CC cell myeloproliferative disorders such as chronic myelogenous leukemia,
 CC primary thrombocythemia and acute leukemia. (M1) is useful in expanding
 CC early hematopoietic progenitors in syngeneic, allogeneic or autologous
 CC bone marrow transplantation, and in enhancing the efficacy of gene
 CC therapy. The present sequence is a PCR primer used in an example from the
 CC invention for cloning SCF.
 XX
 SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 20 CTAATAAAAAAAAAAAAAAAAAA 1

RESULT 628
 ADY86103/c
 ID ADY86103 standard; DNA; 20 BP.

AC ADY86103;

DT 02-JUN-2005 (first entry)

DE dt(20) primer used in cDNA synthesis.

KW Genetic engineering; transgenic plant; ss; primer.

OS Unidentified.

PN US2005066389-A1.

XX 24-MAR-2005.

XX 23-JUN-2004; 2004US-00876086.

XX 23-JUN-2003; 2003US-0480960P.

XX (REGC) UNIV CALIFORNIA.

PI Gallie DR, Young TE;

XX WPI; 2005-241338/25.

PT New nucleic acid, e.g. 1-Aminocyclopropane-1-Carboxylate oxidase or
 PT ethylene insensitive, useful for producing green leaves in maize plants.

XX Example; SEQ ID NO 49; 63pp; English.

XX The present invention relates to the Zea mays 1-Aminocyclopropane-1-
 CC Carboxylate (ACC) oxidase, ACC synthase, ACC deaminase, ethylene response
 CC sensor (ERS), ethylene resistant (ETR) and ethylene insensitive (EIN)
 CC proteins and their DNA. The invention is useful in plant genetic
 CC engineering for producing green leaves in maize plants. The present
 CC sequence is the dt(20) primer used in ACC oxidase, ACC synthase, ACC
 CC deaminase, ERS, ETR and EIN cDNA synthesis.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 629
 ADZ47530/c
 ID ADZ47530 standard; DNA; 20 BP.

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XX AC ADZ47530;
XX DT 30-JUN-2005 (first entry)
XX DE Universal PCR primer, 220-7, SEQ ID NO: 33.
XX DE Stem cell factor; cell growth; immune disorder; immunomodulator;
XX DE genetic disorder; hematological disease; antianemic; cancer; cytostatic;
XX DE neoplasm; neurological disease; neuroprotective; infection;
XX DE antimicrobial; hypopigmentation; dermatological; infertility;
XX DE antiinfertility; inflammation; antiinflammatory; gene therapy; PCR;
XX DE primer; 88.
XX OS Unidentified.
XX PN US2005080250-A1.
XX PD 14-APR-2005.
XX PF 16-JUL-2003; 2003US-00620642.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 10-APR-1991; 91US-00684535.
XX PR 25-NOV-1992; 92US-00982255.
XX PR 21-DEC-1993; 93US-00172329.
XX PR 07-JUN-1995; 95US-00486546.
XX PR 07-AUG-2000; 2000US-00635249.
XX PR 19-JUN-2002; 2002US-00175608.
XX PA (ZSEB/) ZSEBO K M.
XX PA (BOSS/) BOSSELMAN R A.
XX PA (SUGG/) SUGGS S V.
XX PA (MART/) MARTIN F H.
XX PI Zeebo KM, Bosseelman RA, Suggs SV, Martin FH;
XX WI; 2005-321855/33.
XX ST Stimulating growth of stromal cells for treating AIDS or severe combined
XX PT immunodeficiency states in human, primary splenic pancytopenia, milary
XX PT tuberculosis, by administering human stem cell factor polypeptide and
XX PT carrier to human.
XX PS Example 3; SEQ ID NO 33; 216pp; English.
XX CC The present invention relates to a method of stimulating growth of
XX CC stromal cells in a human. The method involves administering to the human
XX CC an effective amount of a human stem cell factor (SCF) polypeptide and
XX CC optionally a pharmaceutically acceptable carrier. The invention is useful
XX CC for treating immune disorders such as (acquired immune deficiency
XX CC syndrome, severe combined immunodeficiency), genetic disorder (such as
XX CC niemann pick disease), hematological diseases (such as multiple myeloma,
XX CC hodgkins disease, spleen disease, anemia), cancers (such as acute
XX CC leukemia, lymphoma), neurological disease (such as niemann pick disease),
XX CC infection (such as Leishmania donovani infection), hypopigmentation
XX CC disorders (such as piebaldism and vitiligo), in the treatment of
XX CC infertility states and for treating intestinal damage resulting from
XX CC irradiation or chemotherapy and inflammation (such as sarcoidosis). The
XX CC invention is also useful in gene therapy and SCF therapy. The present
XX CC sequence is an universal PCR primer. This primer is used in the cloning
XX CC of rat and human SCF cDNA.
XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
DE Human antisense oligonucleotide SEQ ID NO:153.

Db 20 CTAAGAAAAA 1
RESULT 631
AEA01023/c
ID AEA01023 standard; DNA; 20 BP.
XX AC AEA01023;
XX DT 28-JUL-2005 (first entry)
XX DE Synthetic RT-PCR primer.
XX KW DNA amplification; RT-PCR; primer; 88; reverse transcriptase PCR.
XX OS Synthetic.
XX PN WO2005045073-A1.
XX PD 19-MAY-2005.
XX PF 10-NOV-2003; 2003WO-KR002407.
XX PR 10-NOV-2003; 2003WO-KR002407.
XX PA (SEEG-) SERGENE INC.
XX PI Chun J;
XX DR WPI; 2005-366849/37.
XX PT Amplifying unknown nucleotide sequence adjacent to known nucleotide
XX PT sequence, involves performing primary amplification of unknown nucleotide
XX PT sequence using DNA walking annealing control primer and first target-
XX PT specific primer.
XX PS Example 3; SEQ ID NO 27; 66pp; English.
XX CC The invention relates to a method of amplifying an unknown nucleotide
XX CC sequence adjacent to a known nucleotide sequence, comprising performing a
XX CC primary amplification of the unknown nucleotide sequence using a DNA
XX CC walking annealing control primer and a first target-specific primer by
XX CC performing a first- and second-stage amplification of the unknown
XX CC nucleotide sequence. The invention also relates to a DNA walking
XX CC annealing control primer for amplifying an unknown nucleotide sequence
XX CC adjacent to a known nucleotide sequence a kit for carrying out the
XX CC method, comprising a DNA walking annealing control primer. The method is
XX CC useful for amplifying an unknown nucleotide sequence adjacent to a known
XX CC nucleotide sequence. The method exhibits improved annealing specificity,
XX CC due to the presence of a DNA walking annealing control primer. This
XX CC sequence represents a synthetic RT-PCR primer of the invention.
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAA 2728
DE 20 AAAAAA 1
RESULT 631
ADZ97999/c
ID ADZ97999 standard; DNA; 20 BP.
XX AC ADZ97999;
XX DT 28-JUL-2005 (first entry)
XX DE Human antisense oligonucleotide SEQ ID NO:153.

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```
XX KW protein interaction; antisense oligonucleotide; ss.
XX OS Homo sapiens.
XX PN US2005112118-A1.
XX XX 26-MAY-2005.
XX PD
XX XX 20-OCT-2003; 2003US-00690276.
XX PF 02-DEC-1999; 99US-0168377P.
XX PR 02-DEC-1999; 99US-0168377P.
XX PR 25-FEB-2000; 2000US-0185056P.
XX PR 01-DEC-2000; 2000US-00727384.
XX PR 14-DEC-2000; 2000US-0255063P.
XX PR 21-DEC-2000; 2000US-0256986P.
XX PR 04-JAN-2001; 2001US-0259571P.
XX PR 04-JAN-2001; 2001US-0259572P.
XX PR 19-MAR-2001; 2001US-0277013P.
XX PR 23-JUL-2001; 2001US-0307233P.
XX PR 14-DEC-2001; 2001US-00014814.
XX PR 21-DEC-2001; 2001US-00024599.
XX PR 04-JAN-2002; 2002US-00035343.
XX PR 04-JAN-2002; 2002US-00035344.
XX PR 14-MAR-2002; 2002US-00099924.
XX PR 18-MAR-2002; 2002US-00100503.
XX PA (MYRI-) MYRIAD GENETICS INC.
XX PI
XX PI Cimbara D, Heichman K, Bartel P, Mauck K, Bush A;
XX DR WPI; 2005-371623/38.
XX XX
XX PT Modulating, in a host cell, a protein-protein interaction between first
XX PT protein, PRAK, (MAPKAPK5) and second protein, ERK3, (extracellular signal
XX PT -regulated kinase 3) by administering modulating compound.
XX PS Disclosure; SEQ ID NO 153; 296pp; English.
XX XX
XX CC The invention relates to a method for modulating, in a host cell, a
XX CC protein-protein interaction between a first protein which is PRAK (P38-
XX CC regulated/activated protein kinase or MAPKAPK5) and a second protein
XX CC which is ERK3 (extracellular signal-regulated kinase 3). The method
XX CC comprises administering to the cell a compound capable of modulating the
XX CC protein-protein interaction. The method is useful in modulating in a host
XX CC cell a protein-protein interaction between a first protein which is PRAK
XX CC and a second protein which is ERK3 for treating inflammation or
XX CC inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile
XX CC ulcerative colitis, inflammatory bowel disease, proctitis, pelvic
XX CC inflammatory disease, systemic lupus erythematosus, rhinitis,
XX CC conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary
XX CC Lyme disease, psoriasis, dermatitis or eczema. In the exemplification of
XX CC the present invention examples of antisense oligonucleotides specific to
XX CC nucleic acids encoding individual proteins in tables 1 to 82 are provided
XX CC in SEQ ID NOS:11-223 (AD297857-AD298069).
XX XX
XX SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 647 GTAGCCACATGTCAGGGTG 666
Db 20 GTAGCCACATGTCAGGGTG 1
RESULT 632
AD298001/c
ID AD298001 standard; DNA; 20 BP.
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XX AD298001;
XX AC
XX DT 28-JUL-2005 (first entry)
XX XX Human antisense oligonucleotide SEQ ID NO:155.
XX DE protein interaction; antisense oligonucleotide; ss.
XX KW Homo sapiens.
XX OS
XX XX US2005112118-A1.
XX PN 26-MAY-2005.
XX PD
XX XX 20-OCT-2003; 2003US-00690276.
XX PF 02-DEC-1999; 99US-0168377P.
XX PR 02-DEC-1999; 99US-0168377P.
XX PR 25-FEB-2000; 2000US-0185056P.
XX PR 01-DEC-2000; 2000US-00727384.
XX PR 14-DEC-2000; 2000US-0255063P.
XX PR 21-DEC-2000; 2000US-0256986P.
XX PR 04-JAN-2001; 2001US-0259571P.
XX PR 04-JAN-2001; 2001US-0259572P.
XX PR 19-MAR-2001; 2001US-0277013P.
XX PR 23-JUL-2001; 2001US-0307233P.
XX PR 14-DEC-2001; 2001US-00014814.
XX PR 21-DEC-2001; 2001US-00024599.
XX PR 04-JAN-2002; 2002US-00035343.
XX PR 04-JAN-2002; 2002US-00035344.
XX PR 14-MAR-2002; 2002US-00099924.
XX PR 18-MAR-2002; 2002US-00100503.
XX XX
XX PA (MYRI-) MYRIAD GENETICS INC.
XX PI
XX PI Cimbara D, Heichman K, Bartel P, Mauck K, Bush A;
XX DR WPI; 2005-371623/38.
XX XX
XX PT Modulating, in a host cell, a protein-protein interaction between first
XX PT protein, PRAK, (MAPKAPK5) and second protein, ERK3, (extracellular signal
XX PT -regulated kinase 3) by administering modulating compound.
XX PS Disclosure; SEQ ID NO 155; 296pp; English.
XX XX
XX CC The invention relates to a method for modulating, in a host cell, a
XX CC protein-protein interaction between a first protein which is PRAK (P38-
XX CC regulated/activated protein kinase or MAPKAPK5) and a second protein
XX CC which is ERK3 (extracellular signal-regulated kinase 3). The method
XX CC comprises administering to the cell a compound capable of modulating the
XX CC protein-protein interaction. The method is useful in modulating in a host
XX CC cell a protein-protein interaction between a first protein which is PRAK
XX CC and a second protein which is ERK3 for treating inflammation or
XX CC inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile
XX CC chronic arthritis, myositis, Crohn's disease, gastritis, colitis,
XX CC ulcerative colitis, inflammatory bowel disease, proctitis, pelvic
XX CC inflammatory disease, systemic lupus erythematosus, rhinitis,
XX CC conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary
XX CC Lyme disease, psoriasis, dermatitis or eczema. In the exemplification of
XX CC the present invention examples of antisense oligonucleotides specific to
XX CC nucleic acids encoding individual proteins in tables 1 to 82 are provided
XX CC in SEQ ID NOS:11-223 (AD297857-AD298069).
XX XX
XX SQ Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 643 AGCAGTAGCCACATGTCAG 662
|||||
```

Db 20 AGCAGTAGCCACATGTCAG 1

RESULT 633
ADZ98000/c
ID ADZ98000 standard; DNA; 20 BP.
XX
AC ADZ98000;
XX
XX 28-JUL-2005 (first entry)
DT
XX Human antisense oligonucleotide SEQ ID NO:154.
DE
XX protein interaction; antisense oligonucleotide; ss.
KW
XX Homo sapiens.
OS
XX US2005112118-A1.
PN
XX 26-MAY-2005.
PD
XX
PF 20-OCT-2003; 2003US-00690276.
XX
PR 02-DEC-1999; 99US-0168377P.
PR 02-DEC-1999; 99US-0168379P.
PR 25-FEB-2000; 2000US-0185056P.
PR 01-DEC-2000; 2000US-00727384.
PR 14-DEC-2000; 2000US-0255063P.
PR 21-DEC-2000; 2000US-0256986P.
PR 04-JAN-2001; 2001US-0259571P.
PR 04-JAN-2001; 2001US-0259572P.
PR 15-MAR-2001; 2001US-0276179P.
PR 19-MAR-2001; 2001US-0277013P.
PR 23-JUL-2001; 2001US-0307233P.
PR 14-DEC-2001; 2001US-00014814.
PR 21-DEC-2001; 2001US-00024599.
PR 04-JAN-2002; 2002US-00035343.
PR 04-JAN-2002; 2002US-00035344.
PR 14-MAR-2002; 2002US-00099924.
PR 18-MAR-2002; 2002US-00100503.
XX
XX (MYRI-) MYRIAD GENETICS INC.
XX
XX Cimbara D, Heichman K, Bartel P, Mauck K, Bush A;
XX WPI; 2005-371623/38.
XX
XX Modulating, in a host cell, a protein-protein interaction between first
PT protein, PRAK, (MAPKAPK5) and second protein, ERK3, (extracellular signal
PT -regulated kinase 3) by administering modulating compound.
XX
XX Disclosure; SEQ ID NO 154; 296pp; English.
XX
XX The invention relates to a method for modulating, in a host cell, a
CC protein-protein interaction between a first protein which is PRAK (P38-
CC regulated/activated protein kinase or MAPKAPK5) and a second protein
CC which is ERK3 (extracellular signal-regulated kinase 3). The method
CC comprises administering to the cell a compound capable of modulating the
CC protein-protein interaction. The method is useful in modulating in a host
CC cell a protein-protein interaction between a first protein which is PRAK
CC and a second protein which is ERK3 for treating inflammation or
CC inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile
CC chronic arthritis, myositis, Crohn's disease, gastritis, colitis,
CC ulcerative colitis, inflammatory bowel disease, proctitis, pelvic
CC inflammatory disease, systemic lupus erythematosus, rhinitis,
CC conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary
CC Lyme disease, psoriasis, dermatitis or eczema. In the exemplification of
CC the present invention examples of antisense oligonucleotides specific to
CC nucleic acids encoding individual proteins in tables 1 to 82 are provided
CC in SEQ ID NOs:11-223 (ADZ97857-ADZ98069).
XX
XX Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 645 CAGTAGCCACATGTCAGGG 664
Db 20 CAGTAGCCACATGTCAGGG 1
RESULT 634
AEA98126/c
ID AEA98126 standard; DNA; 20 BP.
XX
XX AEA98126;
AC
XX 25-AUG-2005 (first entry)
DT
XX Nucleic analysis 20-mer Thymine oligo.
DE
XX DNA detection; biochip; hybridization; ss.
KW
XX Synthetic.
OS
XX WO2005054458-A1.
PN
XX 16-JUN-2005.
PD
XX 03-DEC-2003; 2003WO-JP015490.
PF
XX 03-DEC-2003; 2003WO-JP015490.
PR
XX (HITA-) HITACHI HIGH TECHNOLOGIES CORP.
XX
XX Kajiyama T, Takahashi S;
XX WPI; 2005-425411/43.
XX
XX Analyzing nucleic acid by performing amplification and individual
PT detection of nucleic acid in chip having reaction layers for
PT accommodating sample and reagent, and portions capable of controlling
PT temperature conditions.
XX
XX Disclosure; SEQ ID NO 1; 50pp; Japanese.
XX
XX The invention relates to a novel method for analyzing a nucleic acid. The
CC method involves performing amplification and individual detection of a
CC nucleic acid in a chip having several reaction layers for accommodating
CC samples and reagents, to enable specific hybridization of the target
CC nucleic acid and portions capable of controlling temperature conditions
CC for amplification and detection of the nucleic acid. The invention
CC further comprises a nucleic acid analyzer consisting of the chip as
CC mentioned in the method, and a temperature control unit for performing
CC hybridization for performing nucleic acid amplification and pre-
CC processing for performing nucleic acid detection. The method enables
CC convenient, cost-effective and highly accurate analysis of a nucleic
CC acid. This sequence represents an oligo used in the nucleic acid
CC analyzing method of the invention.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 635
AEB28251/c
ID AEB28251 standard; DNA; 20 BP.
XX

AC	AEB28251;
XX	
DT	22-SEP-2005 (first entry)
XX	
DE	Oligonucleotide 100T-PTO.
XX	
KW	cosmetics; pharmaceutical; skin allergy; dermatological;
KW	dermatological disease; antiinflammatory; antiallergic; aging; eczema;
KW	alopecia; epidermolysis bullosa; graft rejection; periodontal disease;
KW	psoriasis; antipruritic; sunburn; vitiligo; inflammation; detergent;
KW	dye; pigment; ss; primer; phosphorothioate; phosphodiester.
XX	
OS	Synthetic.
XX	
Key	Location/Qualifiers
FH	modified_base 1..20
FT	/*tag= a
FT	/mod_base= OTHER
FT	/note= "phosphorothioate or phosphodiester linkages"
XX	
FN	WO2005063300-A2.
XX	
PD	14-JUL-2005.
XX	
PF	14-DEC-2004; 2004WO-EP014195.
XX	
PR	23-DEC-2003; 2003DE-01061502.
XX	
PA	(PHEN-) PHENTON GMBH & CO KG.
XX	
PI	Kippenberger S, Kaufmann R, Bernd A, Bock A;
XX	
DR	WPI; 2005-512612/52.
XX	
PT	Cosmetic or pharmaceutical composition for treating epithelial covering
XX	tissue comprises superstructure-forming nucleic acid sequences.
XX	
PS	Disclosure; SEQ ID NO 2; 71pp; German.
XX	
CC	This invention represents a novel cosmetic or pharmaceutical composition
CC	for treating epithelial covering tissue which comprises superstructure-
CC	forming nucleic acid sequences. The composition can also be used in
CC	fabric softeners, hand-washing products, body and hair care products,
CC	hair dyes or manual dishwashing products. The superstructures are G
CC	quadruplexes, frayed wires or i motifs. The sequences are 30-40
CC	nucleotides long, have five or more C, G or I nucleotides in tandem, no
CC	CPG motifs, no nonmethylated CG dinucleotides, are polyI, polyc or polyG
CC	homopolymers and are optionally modified by replacing phosphodiester
CC	linkages with methylphosphonate, phosphoramidate, phosphorothioate or
CC	hydroxylamine linkages, by replaced ribose with other hexo- or
CC	pentopyranoses or 3',5'-carboxylically bridged 2'-deoxyribose
CC	derivatives. The nucleic acid sequences are contained in liposomes. The
CC	composition of the invention inhibits the release of IL-8. The
CC	composition is useful for preventing or treating inflammatory changes to
CC	epithelial covering tissue, including factor caused by pathogens,
CC	autoimmune reactions, tumor necrosis factor toxins and irritants,
CC	especially aging processes, psoriasis, atopic eczema, dry skin, alopecia
CC	areata, vitiligo, bullous diseases, rejection reactions, sunburn and
CC	parodontosis. This sequence represents a phosphorothioate or
CC	phosphodiester oligonucleotide used to illustrate the method of the
CC	invention.
XX	
SQ	Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
	Query Match 0.7%; Score 20; DB 1; Length 20;
	Best Local Similarity 100.0%; Pred. No. 6.8e+02;
	Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy	2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db	20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 636	
AEB28250	
ID	AEB28250 standard; DNA; 20 BP.
XX	
AC	AEB28250;
XX	
DT	22-SEP-2005 (first entry)
XX	
DE	Oligonucleotide 100A-PTO.
XX	
KW	cosmetics; pharmaceutical; skin allergy; dermatological;
KW	dermatological disease; antiinflammatory; antiallergic; aging; eczema;
KW	alopecia; epidermolysis bullosa; graft rejection; periodontal disease;
KW	psoriasis; antipsoriatic; sunburn; vitiligo; inflammation; detergent;
KW	dye; pigment; ss; primer; phosphorothioate; phosphodiester.
XX	
OS	Synthetic.
XX	
FT	Key Location/Qualifiers
FH	modified_base 1..20
FT	/*tag= a
FT	/mod_base= OTHER
FT	/note= "phosphorothioate or phosphodiester linkages"
XX	
FN	WO2005063300-A2.
XX	
PD	14-JUL-2005.
XX	
PF	14-DEC-2004; 2004WO-EP014195.
XX	
PR	23-DEC-2003; 2003DE-01061502.
XX	
PA	(PHEN-) PHENION GMBH & CO KG.
XX	
PI	Kippenberger S, Kaufmann R, Bernd A, Bock A;
XX	
DR	WPI; 2005-512612/52.
XX	
PT	Cosmetic or pharmaceutical composition for treating epithelial covering
PT	tissue comprises superstructure-forming nucleic acid sequences.
XX	
PS	Disclosure; SEQ ID NO 1; 71pp; German.
XX	
CC	This invention represents a novel cosmetic or pharmaceutical composition
CC	for treating epithelial covering tissue which comprises superstructure-
CC	forming nucleic acid sequences. The composition can also be used in
CC	fabric softeners, hand-washing products, body and hair care products,
CC	hair dyes or manual dishwashing products. The superstructures are G
CC	quadruplexes, frayed wires or i motifs. The sequences are 30-40
CC	nucleotides long, have five or more C, G or I nucleotides in tandem, no
CC	CpG motifs, no nonmethylated CG dinucleotides, are polyI, polyC or polyG
CC	homopolymers and are optionally modified by replacing phosphodiester
CC	linkages with methylphosphonate, phosphoramidate, phosphorothioate or
CC	hydroxylamine linkages, by replaced ribose with other hexo- or
CC	pentopyranoses or 3',5'-carboxycyclically bridged 2'-deoxyribose
CC	derivatives. The nucleic acid sequences are contained in liposomes. The
CC	composition of the invention inhibits the release of IL-8. The
CC	composition is useful for preventing or treating inflammatory changes to
CC	epithelial covering tissue, including changes caused by pathogens,
CC	autoimmune reactions, tumor necrosis factor, toxins and irritants,
CC	especially aging processes, psoriasis, atopic eczema, dry skin, alopecia
CC	areata, vitiligo, bullous diseases, rejection reactions, sunburn and
CC	parodontosis. This sequence represents a phosphorothioate or
CC	phosphodiester oligonucleotide used to illustrate the method of the
CC	invention.
XX	
SQ	Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX	
Query Match	0.7%; Score 20; DB 1; Length 20;
Best Local Similarity	100.0%; Fred. No. 6.8e+02;
Matches	20; Conservative 0; Mismatches 0; Indels 0; Gaps
QV	2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Qy 2709 AAAAAAAAAAAAAAAAAA 2728

RESULT 639
AEC37012/C
ID AEC37012 standard; DNA; 20 BP.
XX
AC AEC37012;
XX
DT 03-NOV-2005 (first entry)
XX
DE Oligodeoxythymidine dT20.
XX
KW Antimicrobial; antibacterial; fungicide; protozoacide;
KW bacterial infection; fungal infection; protozoal infection; gene therapy;
KW drug screening; ss.
XX
OS Synthetic.
XX
FN WO2005079523-A2.
XX
PD 01-SEP-2005.
XX
PF 18-FEB-2005; 2005WO-US005398.
XX
PR 18-FEB-2004; 2004US-0545370P.
PR 01-NOV-2004; 2004US-0623909P.
XX
PA (UYGE-) UNIV GEORGIA RES FOUND INC.
XX
PI Evans DL, Kaur H, Jaso-Friedmann L, Leary JH, Praveen K;
XX WPI; 2005-582941/59.
DR
XX
PT New teleost-derived antimicrobial non-scavenger Receptor A, non-toll like
PT receptor polypeptide, useful for treating a disorder resulting from a
PT microbial infection and/or reducing antibiotic resistance.
XX
PS Example 1; SEQ ID NO 10; 84pp; English.
XX
XX
CC The invention provides an isolated antimicrobial non-scavenger receptor
CC A, non-toll like receptor polypeptide having a molecular weight of about
CC 22-30 kDa and having properties selected from: (a) (i) being obtainable
CC from a teleost, e.g. catfish (*Ictalurus punctatus*), mammalian monocytes
CC or mammalian macrophages, (ii) binds to oligoguanosine, (iii) comprises
CC 58 basic amino acids selected Lys and Arg, (iv) comprises 50 hydrophobic
CC amino acids selected from Ala, Ile, Leu, Phe, Trp and Val, and (v)
CC comprises 50 polar amino acids selected from Asn, Cys, Gln, Ser, Thr and
CC Tyr, containing 11 Lys-rich motifs; (b) comprises an amino acid sequence
CC selected from: amino acid residues 1-60, 1-118, 27-51, 136-159, or 173-
CC 203 of the catfish nonspecific cytotoxic cells antimicrobial protein-1
CC (NCAMP-1) AEC37005; (c) catfish NCAMP-1; (d) an allelic variant of
CC catfish NCAMP-1; (e) a polypeptide encoded by a nucleic acid molecule
CC that hybridizes under stringent conditions to the opposite strand of a
CC catfish NCAMP-1 nucleic acid molecule AEC37006; (f) catfish NCAMP-1
CC comprising conservative amino acid substitutions; and (g) a fragment of
CC (a)-(f) of at least 24 contiguous amino acids with antimicrobial
CC activity. A library comprising one or more of these polypeptides is
CC claimed. A method of identifying an antimicrobial polypeptide comprises
CC contacting candidate compounds with the polypeptide or library and
CC selecting those capable of inhibiting the bioactivity of the polypeptide.
CC The polypeptide is obtained by: optionally culturing cytotoxic cells from
CC a teleost fish, mammalian monocytes or mammalian macrophages; isolating
CC membranes from cultured cells consisting of NCCs from a teleost fish;
CC isolating polypeptide from the isolated membranes; and determining if the
CC polypeptide binds to oligoguanosine and/or has antimicrobial activity.
CC Also claimed are nucleic acids encoding the antimicrobial polypeptide,
CC vectors and host cells, and a microarray comprising the nucleic acids. A
CC claimed method for detecting the presence or absence of an antimicrobial
CC polypeptide in a sample comprises determining the presence or absence of
CC a nucleic acid hybridizing to the catfish NCAMP-1 nucleic acid or
CC microarray, and assaying the sample for antimicrobial activity. Host
CC cells comprising the nucleic acid may be used to obtain the claimed
CC polypeptide. An antibody which binds the claimed polypeptide can also be
CC used to identify an antimicrobial protein. A claimed pharmaceutical
CC composition comprising the antimicrobial polypeptide and/or nucleic acid

CC is used to treat a disorder resulting from a microbial infection and/or
CC to reduce antibiotic resistance. The polypeptide is present in an amount
CC effective to inhibit microbial growth, e.g. bacterial, protozoa or fungal
CC growth in a subject, e.g. a mammal (human), or in an amount sufficient to
CC reduce antibiotic resistance. The present sequence is that of
CC oligodeoxythymidine dT20. In an example from the invention, dT20 was used
CC to identify membrane proteins on teleost nonspecific cytotoxic cells that
CC bind single base oligodeoxynucleotide ligands.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 640
AEC37011
ID AEC37011 standard; DNA; 20 BP.
XX
AC AEC37011;
XX
DT 03-NOV-2005 (first entry)
XX
DE Oligodeoxyadenosine dG20.
XX
KW Antimicrobial; antibacterial; fungicide; protozoacide;
KW bacterial infection; fungal infection; protozoal infection; gene therapy;
KW drug screening; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= optional 5' biotin label"
XX
PN WO2005079523-A2.
XX
PD 01-SEP-2005.
XX
PF 18-FEB-2005; 2005WO-US005398.
XX
PR 18-FEB-2004; 2004US-0545370P.
PR 01-NOV-2004; 2004US-0623909P.
XX
PA (UYGE-) UNIV GEORGIA RES FOUND INC.
XX
PI Evans DL, Kaur H, Jaso-Friedmann L, Leary JH, Praveen K;
XX WPI; 2005-582941/59.
DR
XX
PT New teleost-derived antimicrobial non-scavenger Receptor A, non-toll like
PT receptor polypeptide, useful for treating a disorder resulting from a
PT microbial infection and/or reducing antibiotic resistance.
XX
PS Example 1; SEQ ID NO 9; 84pp; English.
XX
XX
CC The invention provides an isolated antimicrobial non-scavenger receptor
CC A, non-toll like receptor polypeptide having a molecular weight of about
CC 22-30 kDa and having properties selected from: (a) (i) being obtainable
CC from a teleost, e.g. catfish (*Ictalurus punctatus*), mammalian monocytes
CC or mammalian macrophages, (ii) binds to oligoguanosine, (iii) comprises
CC 58 basic amino acids selected Lys and Arg, (iv) comprises 50 hydrophobic
CC amino acids selected from Ala, Ile, Leu, Phe, Trp and Val, and (v)
CC comprises 50 polar amino acids selected from Asn, Cys, Gln, Ser, Thr and
CC Tyr, containing 11 Lys-rich motifs; (b) comprises an amino acid sequence
CC selected from: amino acid residues 1-60, 1-118, 27-51, 136-159, or 173-
CC 203 of the catfish nonspecific cytotoxic cells antimicrobial protein-1
CC (NCAMP-1) AEC37005; (c) catfish NCAMP-1; (d) an allelic variant of
CC catfish NCAMP-1; (e) a polypeptide encoded by a nucleic acid molecule
CC that hybridizes under stringent conditions to the opposite strand of a
CC catfish NCAMP-1 nucleic acid molecule AEC37006; (f) catfish NCAMP-1
CC comprising conservative amino acid substitutions; and (g) a fragment of
CC (a)-(f) of at least 24 contiguous amino acids with antimicrobial
CC activity. A library comprising one or more of these polypeptides is
CC claimed. A method of identifying an antimicrobial polypeptide comprises
CC contacting candidate compounds with the polypeptide or library and
CC selecting those capable of inhibiting the bioactivity of the polypeptide.
CC The polypeptide is obtained by: optionally culturing cytotoxic cells from
CC a teleost fish, mammalian monocytes or mammalian macrophages; isolating
CC membranes from cultured cells consisting of NCCs from a teleost fish;
CC isolating polypeptide from the isolated membranes; and determining if the
CC polypeptide binds to oligoguanosine and/or has antimicrobial activity.
CC Also claimed are nucleic acids encoding the antimicrobial polypeptide,
CC vectors and host cells, and a microarray comprising the nucleic acids. A
CC claimed method for detecting the presence or absence of an antimicrobial
CC polypeptide in a sample comprises determining the presence or absence of
CC a nucleic acid hybridizing to the catfish NCAMP-1 nucleic acid or
CC microarray, and assaying the sample for antimicrobial activity. Host
CC cells comprising the nucleic acid may be used to obtain the claimed
CC polypeptide. An antibody which binds the claimed polypeptide can also be
CC used to identify an antimicrobial protein. A claimed pharmaceutical
CC composition comprising the antimicrobial polypeptide and/or nucleic acid

CC 203 of the catfish nonspecific cytotoxic cells antimicrobial protein-1
 CC (NCAMP-1) AEC37005; (c) catfish NCAMP-1; (d) an allelic variant of
 CC catfish NCAMP-1; (e) a polypeptide encoded by a nucleic acid molecule
 CC that hybridizes under stringent conditions to the opposite strand of a
 CC catfish NCAMP-1 nucleic acid molecule AEC37006; (f) catfish NCAMP-1
 CC comprising conservative amino acid substitutions; and (g) a fragment of
 CC (a)-(f) of at least 24 contiguous amino acids with antimicrobial
 CC activity. A library comprising one or more of these polypeptides is
 CC claimed. A method of identifying an antimicrobial polypeptide comprises
 CC contacting candidate compounds with the polypeptide or library and
 CC selecting those capable of inhibiting the bioactivity of the polypeptide.
 CC The polypeptide is obtained by: optionally culturing cytotoxic cells from
 CC a teleost fish, mammalian monocytes or mammalian macrophages; isolating
 CC membranes from cultured cells consisting of NCCs from a teleost fish;
 CC isolating polypeptide from the isolated membranes; and determining if the
 CC polypeptide binds to oligoguanosine and/or has antimicrobial activity.
 CC Also claimed are nucleic acids encoding the antimicrobial polypeptide,
 CC vectors and host cells, and a microarray comprising the nucleic acids. A
 CC claimed method for detecting the presence or absence of an antimicrobial
 CC polypeptide in a sample comprises determining the presence or absence of
 CC a nucleic acid hybridizing to the catfish NCAMP-1 nucleic acid or
 CC microarray, and assaying the sample for antimicrobial activity. Host
 CC cells comprising the nucleic acid may be used to obtain the claimed
 CC polypeptide. An antibody which binds the claimed polypeptide can also be
 CC used to identify an antimicrobial protein. A claimed pharmaceutical
 CC composition comprising the antimicrobial polypeptide and/or nucleic acid
 CC is used to treat a disorder resulting from a microbial infection and/or
 CC to reduce antibiotic resistance. The polypeptide is present in an amount
 CC effective to inhibit microbial growth, e.g. bacterial, protozoa or fungal
 CC growth in a subject, e.g. a mammal (human), or in an amount sufficient to
 CC reduce antibiotic resistance. The present sequence is that of
 CC oligodeoxyadenosine dA20. In an example from the invention, dA20 was used
 CC to identify membrane proteins on teleost nonspecific cytotoxic cells that
 CC bind single base oligodeoxynucleotide ligands.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAA 20

RESULT 641
 AEC91079/c
 ID AEC91079 standard; DNA; 20 BP.
 AC AEC91079;
 XX 17-NOV-2005 (first entry)
 XX p53 cancer inhibition gene negative control DNA probe, SEQ ID 7.
 DE

XX biochip; probe; ss.
 XX Synthetic.
 OS

XX JP2005249429-A.
 XX 15-SEP-2005.

XX 01-MAR-2004; 2004JP-00056758.
 XX 01-MAR-2004; 2004JP-00056758.

XX (EBAR) EBARA CORP.
 XX Nakamura K, Abe Y, Ogure N;
 XX WPI; 2005-668391/69.

XX Reaction detection chip e.g. deoxyribonucleic acid chip for diagnosis of
 PT cancer, has porous-glass particles that are embedded in organic film, as
 PT monolayer.

XX Example; SEQ ID NO 7; 19pp; Japanese.

XX The invention relates to a novel reaction detection chip e.g. a DNA chip
 CC for diagnosis of disease. The novel chip has porous-glass particles that
 CC are embedded in organic film (e.g. vinyl acetate) as a monolayer on a
 CC substrate (e.g. silicon). The analyte is preferably detected by
 CC fluorescence. The invention further includes a process for the
 CC manufacturing of the detection chip. The detection chip is useful e.g. as
 CC a DNA chip for diagnosis of cancer, and also for analysis of medical
 CC treatment of pathogenesis related gene of multifactorial disorder. This
 CC oligo sequence represents a control DNA probe used in the novel detection
 CC chip of the invention.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 642

AED13293

ID AED13293 standard; DNA; 20 BP.

AC AED13293;

XX 01-DEC-2005 (first entry)

XX Oligonucleotide ODN1 used to illustrate nucleic acid labeling method.

XX DNA detection; RNA detection; SNP detection; ss.

XX Synthetic.

XX JP2005265617-A.

XX 29-SEP-2005.

XX 18-MAR-2004; 2004JP-00078900.

XX 18-MAR-2004; 2004JP-00078900.

XX (TAKE/) TAKENAKA S.

XX Takenaka S, Nojima T, Mukumoto K, Tabata E;

XX WPI; 2005-685344/71.

XX Labeling double stranded nucleic acid, involves utilizing carbodiimide
 PT derivative for labeling thymine, uracil and guanine, which exists in
 PT mismatch region of nucleic acid or unstable region of hydrogen bond of
 PT nucleic acid.

XX Example 1; Page 24; 40pp; Japanese.

XX The present invention relates to a method (M1) for labeling double
 CC stranded nucleic acid for efficient detection of DNA or RNA. The method
 CC comprises using a carbodiimide derivative for labeling one or more of
 CC thymine, uracil and guanine, which exists in the mismatch region of the
 CC double stranded nucleic acid or its vicinity, or unstable region of the
 CC hydrogen bond of the double stranded nucleic acid. (M1) is useful for
 CC labeling double stranded or single stranded nucleic acid or detecting
 CC single nucleotide polymorphisms. The present sequence was used to
 CC illustrate the method of the invention.

```
XX SQ Sequence 20 BP; 19 A; 0 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAA 2727
Db 1 TAAAAAAAAAAAAAAAAAAAA 20

RESULT 643
AED11364
ID AED11364 standard; DNA; 20 BP.
XX AC AED11364;
XX AC
XX DT 01-DEC-2005 (first entry)
XX XX
XX Thermodynamic molecule separation test DNA probe, SEQ ID 6.
XX molecule separation; purification; probe; ss.
XX Synthetic.
XX OS
XX JP2005262199-A.
XX PN
XX JP2005262199-A.
XX PD
XX 29-SEP-2005.
XX XX
XX 23-AUG-2004; 2004JP-00243038.
XX PF
XX 17-FEB-2004; 2004JP-00040620.
XX PR
XX (DOKU-) DOKURITSU GVOSHI HOJIN SANGYO GIJUTSU SO.
XX PA
XX Yamashita K, Maeda H, Miyazaki M, Nakamura H, Yamaguchi K;
XX WPI; 2005-679037/70.
XX DR
XX
XX Molecule separation for biotechnology, comprises forming a nonturbulent
PT flow condition for each solute molecule based on thermodynamic
PT characteristics and changing flow conditions at arbitrary points.
XX
XX Example 2; SEQ ID NO 6; 12pp; Japanese.
XX PS
XX
XX The invention relates to a novel method for molecule separation. The
CC method comprises that a non-turbulent flow condition is formed for each
CC solute molecule contained in a molecular solution separately, based on
CC the thermodynamic characteristics of both molecules. The invention
CC further describes a molecule separation device. The molecule separation
CC method is useful for the manufacturing of chemical substances, in
CC biotechnology and for separating DNA fragments. The method separates the
CC required molecule from a molecular mixture effectively and rapidly. This
CC oligo sequence represents a DNA probe used to test the novel molecule
CC separation method of the invention.
XX
XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAA 2728
Db 1 AAAAAAAAAAAAAAAAAAAAA 20

RESULT 644
AED42120/C
ID AED42120 standard; DNA; 20 BP.
XX AC AED42120;
XX AC
```

```
XX DT
XX 15-DEC-2005 (first entry)
XX Antisense oligo of human protein-protein complex polypeptide, SEQ ID 186.
XX
XX Cytostatic; Vasotropic; Cerebroprotective; Immunosuppressive;
XX Antidiabetic; Cardiant; Neuroprotective; Antiasthmatic; Antiinflammatory;
XX Antibacterial; Osteopathic; Anorectic; Virucide; Anti-HIV; Nephrotropic;
XX Antiarteriosclerotic; Muscular-Gen.; protein interaction;
XX protein microarray; cancer; familial adenomatous polyposis;
XX gastrointestinal-gen.; ischemia; cerebrovascular ischemia;
XX autoimmune disease; diabetes; heart disease; neurodegenerative disease;
XX asthma; inflammation; sepsis; osteoporosis; obesity; viral infection;
XX acquired immune deficiency syndrome; glomerulonephritis; atherosclerosis;
XX muscular dystrophy; antisense oligonucleotide; ss.
XX
XX Homo sapiens.
XX OS
XX US2005222029-A1.
XX PN
XX 06-OCT-2005.
XX PD
XX
XX 07-MAR-2005; 2005US-00075234.
XX PF
XX
XX 04-JAN-2001; 2001US-0259571P.
XX PR
XX 04-JAN-2001; 2001US-0259573P.
XX PR
XX 14-MAR-2001; 2001US-0276259P.
XX PR
XX 15-MAR-2001; 2001US-0276179P.
XX PR
XX 19-MAR-2001; 2001US-0277013P.
XX PR
XX 16-APR-2001; 2001US-0284095P.
XX PR
XX 17-APR-2001; 2001US-0284220P.
XX PR
XX 19-APR-2001; 2001US-0285324P.
XX PR
XX 30-APR-2001; 2001US-0287513P.
XX PR
XX 10-JUL-2001; 2001US-0304101P.
XX PR
XX 23-JUL-2001; 2001US-0307233P.
XX PR
XX 25-OCT-2001; 2001US-0347829P.
XX PR
XX 04-JAN-2002; 2002US-00035344.
XX PR
XX 07-JAN-2002; 2002US-0346384P.
XX PR
XX 17-JAN-2002; 2002US-0349843P.
XX PR
XX 06-FEB-2002; 2002US-0354899P.
XX PR
XX 14-MAR-2002; 2002US-00098979.
XX PR
XX 18-MAR-2002; 2002US-00099924.
XX PR
XX 15-APR-2002; 2002US-00100503.
XX PR
XX 17-APR-2002; 2002US-00122573.
XX PR
XX 18-APR-2002; 2002US-00124767.
XX PR
XX 29-APR-2002; 2002US-00125639.
XX PR
XX (MYRI-) MYRIAD GENETICS INC.
XX PA
XX Bartel P, Cimbora D, Sugiyama J, Wettstein DA, Heichman K;
XX WPI; 2005-664172/68.
XX DR
XX
XX New isolated protein complex having a first protein interacting with a
PT second protein, useful for treating or preventing, e.g. cancer, ischemia,
PT stroke, autoimmune diseases, diabetes, coronary heart disease, or asthma.
XX
XX Disclosure; SEQ ID NO 186; 198pp; English.
XX
XX The invention relates to a novel isolated protein complex having a first
CC protein interacting with a second protein. The invention further
CC comprises: a protein microarray comprising the protein complex; a method
CC for selecting modulators of the protein complex; a method of selecting
CC modulators of an interaction between a first protein and a second protein
CC ; and the treating and/or preventing of diseases and disorders associated
CC with the protein complexes. The protein complexes are useful in screening
CC assays for identifying compounds effective in modulating the protein
CC complexes, and in treating and/or preventing diseases and disorders
CC associated with the protein complexes. The diseases and disorders include
```

CC cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
 CC diabetes, coronary heart disease, neurodegenerative diseases, asthma,
 CC inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,
 CC AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
 CC sequence represents an antisense oligo of a human protein which forms
 CC part of a protein-protein complex of the invention.
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 648 TAGCCACATGTCAGGGTGG 667
 |||||
 Db 20 TAGCCACATGTCAGGGTGG 1

RESULT 645
 AED42121/c
 ID AED42121 standard; DNA; 20 BP.
 XX
 AC AED42121;
 XX
 DT 15-DEC-2005 (first entry)
 XX
 DE Antisense oligo of human protein-protein complex polypeptide, SEQ ID 187.
 KW Cytostatic; Vasotropic; Cerebroprotective; Immunosuppressive;
 KW Antidiabetic; Cardiant; Neuroprotective; Antiasthmatic; Antiinflammatory;
 KW Antibacterial; Osteopathic; Anorectic; Virucide; Anti-HIV; Nephrotropic;
 KW Antiarteriosclerotic; Muscular-Gen.; protein interaction;
 KW protein microarray; cancer; familial adenomatous polyposis;
 KW gastrointestinal-gen.; ischemia; cerebrovascular ischemia;
 KW autoimmune disease; diabetes; heart disease; neurodegenerative disease;
 KW asthma; inflammation; sepsis; osteoporosis; obesity; viral infection;
 KW acquired immune deficiency syndrome; glomerulonephritis; atherosclerosis;
 KW muscular dystrophy; antisense oligonucleotide; ss.
 XX
 OS Homo sapiens.
 XX
 XX US2005222029-A1.
 PN
 PD 06-OCT-2005.
 XX
 XX 07-MAR-2005; 2005US-00075234.
 XX
 PR 04-JAN-2001; 2001US-0259571P.
 PR 04-JAN-2001; 2001US-0259573P.
 PR 14-MAR-2001; 2001US-0276259P.
 PR 15-MAR-2001; 2001US-0276179P.
 PR 19-MAR-2001; 2001US-0277013P.
 PR 16-APR-2001; 2001US-0284095P.
 PR 17-APR-2001; 2001US-0284220P.
 PR 17-APR-2001; 2001US-0284404P.
 PR 19-APR-2001; 2001US-0285324P.
 PR 30-APR-2001; 2001US-0287513P.
 PR 10-JUL-2001; 2001US-0304101P.
 PR 23-JUL-2001; 2001US-0307233P.
 PR 22-OCT-2001; 2001US-0347829P.
 PR 25-OCT-2001; 2001US-0343818P.
 PR 04-JAN-2002; 2002US-00035344.
 PR 07-JAN-2002; 2002US-0346384P.
 PR 17-JAN-2002; 2002US-0349843P.
 PR 06-FEB-2002; 2002US-0354899P.
 PR 14-MAR-2002; 2002US-00099924.
 PR 14-MAR-2002; 2002US-00099924.
 PR 18-MAR-2002; 2002US-00100503.
 PR 15-APR-2002; 2002US-00122573.
 PR 17-APR-2002; 2002US-00124550.
 PR 17-APR-2002; 2002US-00124767.
 PR 18-APR-2002; 2002US-00125639.
 PR 29-APR-2002; 2002US-00135802.

XX (MYRI-) MYRIAD GENETICS INC.
 PA
 XX Bartel P, Cimbora D, Sugiyama J, Wettstein DA, Heichman K;
 PI
 XX WPI; 2005-664172/68.
 XX
 XX New isolated protein complex having a first protein interacting with a
 PT second protein, useful for treating or preventing, e.g. cancer, ischemia,
 PT stroke, autoimmune diseases, diabetes, coronary heart disease, or asthma.
 XX
 PS Disclosure; SEQ ID NO 187; 198pp; English.
 XX
 CC The invention relates to a novel isolated protein complex having a first
 CC protein interacting with a second protein. The invention further
 CC comprises: a protein microarray comprising the protein complex; a method
 CC for selecting modulators of the protein complex; a method of selecting
 CC modulators of an interaction between a first protein and a second protein
 CC ; and the treating and/or preventing of diseases and disorders associated
 CC with the protein complexes. The protein complexes are useful in screening
 CC assays for identifying compounds effective in modulating the protein
 CC complexes, and in treating and/or preventing diseases and disorders
 CC associated with the protein complexes. The diseases and disorders include
 CC cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
 CC diabetes, coronary heart disease, osteoporosis, obesity, viral infection,
 CC inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,
 CC AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
 CC sequence represents an antisense oligo of a human protein which forms
 CC part of a protein-protein complex of the invention.
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 646 AGTAGCCACATGTCAGGGT 665
 |||||
 Db 20 AGTAGCCACATGTCAGGGT 1

RESULT 646
 AED42119/c
 ID AED42119 standard; DNA; 20 BP.
 XX
 AC AED42119;
 XX
 DT 15-DEC-2005 (first entry)
 XX
 DE Antisense oligo of human protein-protein complex polypeptide, SEQ ID 185.
 KW Cytostatic; Vasotropic; Cerebroprotective; Immunosuppressive;
 KW Antidiabetic; Cardiant; Neuroprotective; Antiasthmatic; Antiinflammatory;
 KW Antibacterial; Osteopathic; Anorectic; Virucide; Anti-HIV; Nephrotropic;
 KW Antiarteriosclerotic; Muscular-Gen.; protein interaction;
 KW protein microarray; cancer; familial adenomatous polyposis;
 KW gastrointestinal-gen.; ischemia; cerebrovascular ischemia;
 KW autoimmune disease; diabetes; heart disease; neurodegenerative disease;
 KW asthma; inflammation; sepsis; osteoporosis; obesity; viral infection;
 KW acquired immune deficiency syndrome; glomerulonephritis; atherosclerosis;
 KW muscular dystrophy; antisense oligonucleotide; ss.
 XX
 OS Homo sapiens.
 XX
 XX US2005222029-A1.
 PN
 PD 06-OCT-2005.
 XX
 XX 07-MAR-2005; 2005US-00075234.
 XX
 PR 04-JAN-2001; 2001US-0259571P.
 PR 04-JAN-2001; 2001US-0259573P.
 PR 14-MAR-2001; 2001US-0276259P.
 PR 15-MAR-2001; 2001US-0276179P.
 PR 19-MAR-2001; 2001US-0277013P.
 PR 16-APR-2001; 2001US-0284095P.
 PR 17-APR-2001; 2001US-0284220P.
 PR 17-APR-2001; 2001US-0284404P.
 PR 19-APR-2001; 2001US-0285324P.
 PR 30-APR-2001; 2001US-0287513P.
 PR 10-JUL-2001; 2001US-0304101P.
 PR 23-JUL-2001; 2001US-0307233P.
 PR 22-OCT-2001; 2001US-0347829P.
 PR 25-OCT-2001; 2001US-0343818P.
 PR 04-JAN-2002; 2002US-00035344.
 PR 07-JAN-2002; 2002US-0346384P.
 PR 17-JAN-2002; 2002US-0349843P.
 PR 06-FEB-2002; 2002US-0354899P.
 PR 14-MAR-2002; 2002US-00099924.
 PR 14-MAR-2002; 2002US-00099924.
 PR 18-MAR-2002; 2002US-00100503.
 PR 15-APR-2002; 2002US-00122573.
 PR 17-APR-2002; 2002US-00124550.
 PR 17-APR-2002; 2002US-00124767.
 PR 18-APR-2002; 2002US-00125639.
 PR 29-APR-2002; 2002US-00135802.

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PR 15-MAR-2001; 2001US-0276179P.
PR 19-MAR-2001; 2001US-0277013P.
PR 16-APR-2001; 2001US-0284095P.
PR 17-APR-2001; 2001US-0284220P.
PR 17-APR-2001; 2001US-0284404P.
PR 19-APR-2001; 2001US-0285324P.
PR 30-APR-2001; 2001US-0287513P.
PR 10-JUL-2001; 2001US-0304101P.
PR 23-JUL-2001; 2001US-0307233P.
PR 22-OCT-2001; 2001US-0347829P.
PR 25-OCT-2001; 2001US-0343818P.
PR 04-JAN-2002; 2002US-00035344.
PR 07-JAN-2002; 2002US-0346384P.
PR 17-JAN-2002; 2002US-0349843P.
PR 06-FEB-2002; 2002US-0354899P.
PR 14-MAR-2002; 2002US-00098979.
PR 14-MAR-2002; 2002US-00099924.
PR 18-MAR-2002; 2002US-00100503.
PR 15-APR-2002; 2002US-00122573.
PR 17-APR-2002; 2002US-00124550.
PR 17-APR-2002; 2002US-00124767.
PR 18-APR-2002; 2002US-00125639.
PR 29-APR-2002; 2002US-00135802.
XX
XX (MYRI-) MYRIAD GENETICS INC.
XX
XX Bartel P, Cimbora D, Sugiyama J, Wettstein DA, Heichman K;
XX WPI; 2005-664172/68.
XX
XX New isolated protein complex having a first protein interacting with a
PT second protein, useful for treating or preventing, e.g. cancer, ischemia,
PT stroke, autoimmune diseases, diabetes, coronary heart disease, or asthma.
XX
XX Disclosure; SEQ ID NO 185; 198pp; English.
XX
XX The invention relates to a novel isolated protein complex having a first
CC protein interacting with a second protein. The invention further
CC comprises a protein microarray comprising the protein complex; a method
CC for selecting modulators of the protein complex; a method of selecting
CC modulators of an interaction between a first protein and a second protein
CC ; and the treating and/or preventing of diseases and disorders associated
CC with the protein complexes. The protein complexes are useful in screening
CC assays for identifying compounds effective in modulating the protein
CC complexes, and in treating and/or preventing diseases and disorders
CC associated with the protein complexes. The diseases and disorders include
CC cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
CC diabetes, coronary heart disease, neurodegenerative diseases, asthma,
CC inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,
CC AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
CC sequence represents an antisense oligo of a human protein which forms
CC part of a protein-protein complex of the invention.
XX
XX Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 650 GCCAACATGTCAGGTGGGA 669
Db 20 GCCAACATGTCAGGTGGGA 1

RESULT 647
AED75083/c
ID AED75083 standard; DNA; 20 BP.
XX
XX AED75083;
AC
AC
AC
DT 12-JAN-2006 (first entry)
XX
XX Immunostimulatory oligonucleotide, SEQ ID 218.

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XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
XX Anticancer; Dermatological; Antiallergic; helper T-lymphocyte;
XX immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
XX Crohns disease; ulcerative colitis; eczema; skin allergy;
XX contact dermatitis; ss; phosphorothioate.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
XX
XX US2005250726-A1.
XX
XX 10-NOV-2005.
XX
XX 12-MAY-2005; 2005US-00127654.
XX
XX 29-MAR-2001; 2001US-0279642P.
XX 29-MAR-2002; 2002US-00112653.
XX
XX (IOWA ) UNIV IOWA RES FOUND.
XX
XX Krieg AM, Berg DJ;
XX WPI; 2005-768014/78.
XX
XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
PT to augment T-helper cells like immune activation and to treat non-
PT allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.
XX
XX Disclosure; SEQ ID NO 218; 58pp; English.
XX
XX The present invention relates to a method for augmenting T-helper 1 cells
CC (Th1)-like immune activation in a subject. The method comprises
CC administering an immunostimulatory nucleic acid (I) to induce Th1-like
CC immune activation; and administering a cyclooxygenase inhibitor (II) to
CC inhibit prostaglandin expression, is new. The present sequence is one
CC such immunostimulatory nucleic acid. (I) is useful for treating non-
CC allergic inflammatory diseases such as psoriasis, inflammatory bowel
CC diseases (Crohn's disease and ulcerative colitis), eczema, allergic
CC contact dermatitis or latex dermatitis.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 648
AED75397/c
ID AED75397 standard; DNA; 20 BP.
XX
XX AED75397;
AC
AC
AC
DT 12-JAN-2006 (first entry)
XX
XX Immunostimulatory oligonucleotide, SEQ ID 533.
XX
XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
XX Anticancer; Dermatological; Antiallergic; helper T-lymphocyte;
XX immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
XX Crohns disease; ulcerative colitis; eczema; skin allergy;
XX contact dermatitis; ss.
XX
XX

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OS Synthetic.
 XX US2005250726-A1.
 XX
 XX 10-NOV-2005.
 PD
 XX 12-MAY-2005; 2005US-00127654.
 XX
 XX 29-MAR-2001; 2001US-0279642P.
 PR 29-MAR-2002; 2002US-00112653.
 XX
 XX (IOWA) UNIV IOWA RES FOUND.
 PA
 XX Krieg AM, Berg DJ;
 PI
 XX WPI; 2005-768014/78.
 DR
 XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
 PT to augment T-helper1 cells like immune activation and to treat non-
 PT allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.
 XX
 XX Disclosure; SEQ ID NO 533; 58pp; English.
 PS
 XX The present invention relates to a method for augmenting T-helper 1 cells
 CC (Th1)-like immune activation in a subject. The method comprises
 CC administering an immunostimulatory nucleic acid (I) to induce Th1-like
 CC immune activation; and administering a cyclooxygenase inhibitor (II) to
 CC inhibit prostaglandin expression, is new. The present sequence is one
 CC such immunostimulatory nucleic acid. (I) is useful for treating non-
 CC allergic inflammatory diseases such as psoriasis, inflammatory bowel
 CC diseases (Crohn's disease and ulcerative colitis), eczema, allergic
 CC contact dermatitis or latex dermatitis.
 XX
 XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 SQ
 XX
 XX Query Match 0.7%; Score 20; DB 1; Length 20;
 XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
 XX
 XX
 XX RESULT 649
 XX AED75401
 ID AED75401 standard; DNA; 20 BP.
 XX
 XX AED75401;
 AC
 XX
 XX 12-JAN-2006 (first entry)
 DT
 XX Immunostimulatory oligonucleotide, SEQ ID 537.
 DE
 XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
 KW Antiulcer; Dermatological; Antiallergic; helper T-lymphocyte;
 KW immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
 KW Crohns disease; ulcerative colitis; eczema; skin allergy;
 KW contact dermatitis; ss.
 XX
 XX Synthetic.
 OS
 XX US2005250726-A1.
 PN
 XX
 XX 10-NOV-2005.
 PD
 XX 12-MAY-2005; 2005US-00127654.
 PF
 XX 29-MAR-2001; 2001US-0279642P.
 PR 29-MAR-2002; 2002US-00112653.
 XX
 XX (IOWA) UNIV IOWA RES FOUND.
 PA
 XX Krieg AM, Berg DJ;
 PI
 XX WPI; 2005-768014/78.
 DR
 XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
 PT to augment T-helper1 cells like immune activation and to treat non-
 PT allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.
 XX
 XX Disclosure; SEQ ID NO 533; 58pp; English.
 PS
 XX The present invention relates to a method for augmenting T-helper 1 cells
 CC (Th1)-like immune activation in a subject. The method comprises
 CC administering an immunostimulatory nucleic acid (I) to induce Th1-like
 CC immune activation; and administering a cyclooxygenase inhibitor (II) to
 CC inhibit prostaglandin expression, is new. The present sequence is one
 CC such immunostimulatory nucleic acid. (I) is useful for treating non-
 CC allergic inflammatory diseases such as psoriasis, inflammatory bowel
 CC diseases (Crohn's disease and ulcerative colitis), eczema, allergic
 CC contact dermatitis or latex dermatitis.
 XX
 XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 SQ
 XX
 XX Query Match 0.7%; Score 20; DB 1; Length 20;
 XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
 XX
 XX
 XX RESULT 649
 XX AED75401
 ID AED75401 standard; DNA; 20 BP.
 XX
 XX AED75401;
 AC
 XX
 XX 12-JAN-2006 (first entry)
 DT
 XX Immunostimulatory oligonucleotide, SEQ ID 537.
 DE
 XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
 KW Antiulcer; Dermatological; Antiallergic; helper T-lymphocyte;
 KW immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
 KW Crohns disease; ulcerative colitis; eczema; skin allergy;
 KW contact dermatitis; ss.
 XX
 XX Synthetic.
 OS
 XX US2005250726-A1.
 PN
 XX
 XX 10-NOV-2005.
 PD
 XX 12-MAY-2005; 2005US-00127654.
 PF
 XX 29-MAR-2001; 2001US-0279642P.
 PR 29-MAR-2002; 2002US-00112653.
 XX
 XX (IOWA) UNIV IOWA RES FOUND.
 PA
 XX Krieg AM, Berg DJ;
 PI
 XX WPI; 2005-768014/78.
 DR
 XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
 PT to augment T-helper1 cells like immune activation and to treat non-
 PT allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.
 XX
 XX Disclosure; SEQ ID NO 533; 58pp; English.
 PS
 XX The present invention relates to a method for augmenting T-helper 1 cells
 CC (Th1)-like immune activation in a subject. The method comprises
 CC administering an immunostimulatory nucleic acid (I) to induce Th1-like
 CC immune activation; and administering a cyclooxygenase inhibitor (II) to
 CC inhibit prostaglandin expression, is new. The present sequence is one
 CC such immunostimulatory nucleic acid. (I) is useful for treating non-
 CC allergic inflammatory diseases such as psoriasis, inflammatory bowel
 CC diseases (Crohn's disease and ulcerative colitis), eczema, allergic
 CC contact dermatitis or latex dermatitis.
 XX
 XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 SQ
 XX
 XX Query Match 0.7%; Score 20; DB 1; Length 20;
 XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
 XX
 XX
 XX RESULT 650
 XX AED67952/c
 ID AED67952 standard; DNA; 20 BP.
 XX
 XX AED67952;
 AC
 XX
 XX 12-JAN-2006 (first entry)
 DT
 XX T20 oligonucleotide used to prepare aptamer-coated gold probe arrays.
 DE
 XX Analyte detection; DNA detection; protein detection; ss.
 KW
 XX Unidentified.
 OS
 XX US2005250094-A1.
 PN
 XX
 XX 10-NOV-2005.
 PD
 XX
 XX 22-NOV-2004; 2004US-00995051.
 PF
 XX 30-MAY-2003; 2003US-0474569P.
 PR 29-AUG-2003; 2003US-0499034P.
 PR 04-NOV-2003; 2003US-0517450P.
 PR 03-MAY-2004; 2004US-0567874P.
 PR 27-MAY-2004; 2004US-00854848.
 XX
 XX (NANO-) NANOSPHERE INC.
 PA
 XX Storhoff JJ, Lucas A, Muller UR, Bao YP, Senical M, Garimella V;
 PI
 XX WPI; 2005-784662/80.
 DR
 XX Detecting target (e.g. nucleic acid, protein, lipid, bacterium) in
 PT sample, comprises contacting sample with one or more types of
 PT nanoparticle having target binding complements, and detecting any light
 PT scattering complex formed.
 XX
 XX Example 18; SEQ ID NO 23; 70pp; English.
 PS
 XX The present invention provides a method for detecting the presence or
 CC absence of a single target molecule or target analyte (e.g. nucleic acid,
 CC protein, lipid, bacterium). The method involves contacting sample with

PI Krieg AM, Berg DJ;
 XX
 XX WPI; 2005-768014/78.
 DR
 XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
 PT to augment T-helper1 cells like immune activation and to treat non-
 PT allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.
 XX
 XX Disclosure; SEQ ID NO 537; 58pp; English.
 PS
 XX The present invention relates to a method for augmenting T-helper 1 cells
 CC (Th1)-like immune activation in a subject. The method comprises
 CC administering an immunostimulatory nucleic acid (I) to induce Th1-like
 CC immune activation; and administering a cyclooxygenase inhibitor (II) to
 CC inhibit prostaglandin expression, is new. The present sequence is one
 CC such immunostimulatory nucleic acid. (I) is useful for treating non-
 CC allergic inflammatory diseases such as psoriasis, inflammatory bowel
 CC diseases (Crohn's disease and ulcerative colitis), eczema, allergic
 CC contact dermatitis or latex dermatitis.
 XX
 XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 XX
 XX Query Match 0.7%; Score 20; DB 1; Length 20;
 XX Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 XX Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 1 AAAAAAAAAAAAAAAAAAAAAA 20
 XX
 XX
 XX RESULT 650
 XX AED67952/c
 ID AED67952 standard; DNA; 20 BP.
 XX
 XX AED67952;
 AC
 XX
 XX 12-JAN-2006 (first entry)
 DT
 XX T20 oligonucleotide used to prepare aptamer-coated gold probe arrays.
 DE
 XX Analyte detection; DNA detection; protein detection; ss.
 KW
 XX Unidentified.
 OS
 XX US2005250094-A1.
 PN
 XX
 XX 10-NOV-2005.
 PD
 XX
 XX 22-NOV-2004; 2004US-00995051.
 PF
 XX 30-MAY-2003; 2003US-0474569P.
 PR 29-AUG-2003; 2003US-0499034P.
 PR 04-NOV-2003; 2003US-0517450P.
 PR 03-MAY-2004; 2004US-0567874P.
 PR 27-MAY-2004; 2004US-00854848.
 XX
 XX (NANO-) NANOSPHERE INC.
 PA
 XX Storhoff JJ, Lucas A, Muller UR, Bao YP, Senical M, Garimella V;
 PI
 XX WPI; 2005-784662/80.
 DR
 XX Detecting target (e.g. nucleic acid, protein, lipid, bacterium) in
 PT sample, comprises contacting sample with one or more types of
 PT nanoparticle having target binding complements, and detecting any light
 PT scattering complex formed.
 XX
 XX Example 18; SEQ ID NO 23; 70pp; English.
 PS
 XX The present invention provides a method for detecting the presence or
 CC absence of a single target molecule or target analyte (e.g. nucleic acid,
 CC protein, lipid, bacterium). The method involves contacting sample with

CC one or more types of nanoparticle having target binding complements and
 CC detecting any light scattering complex formed. The nanoparticle probe
 CC complexes comprise two or more probes bound to a specific target analyte.
 CC The present sequence is an oligonucleotide used to prepare aptamer-coated
 CC gold probe arrays.

XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 651

AED67955/c
 ID AED67955 standard; DNA; 20 BP.

XX AC AED67955;

XX 12-JAN-2006 (first entry)

XX T20 diluent SEQ ID: 26 #1 used to prepare aptamer-coated gold probes.

XX Analyte detection; DNA detection; protein detection; ss.

XX Synthetic.

XX Key Location/Qualifiers
 FH modified_base 1

FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= Linked to a steroid"

XX US2005250094-A1.

XX 10-NOV-2005.

XX 22-NOV-2004; 2004US-00995051.

XX 30-MAY-2003; 2003US-0474569P.

XX 29-AUG-2003; 2003US-0499034P.

XX 04-NOV-2003; 2003US-0517450P.

XX 03-MAY-2004; 2004US-0567874P.

XX 27-MAY-2004; 2004US-00854848.

XX (NANO-) NANOSPHERE INC.

XX Storhoff JJ, Lucas A, Muller UR, Bao YP, Senical M, Garimella V;

XX WPI; 2005-784662/80.

XX Detecting target (e.g. nucleic acid, protein, lipid, bacterium) in
 PT sample, comprises contacting sample with one or more types of
 PT nanoparticle having target binding complements, and detecting any light
 PT scattering complex formed.

XX Disclosure; SEQ ID NO 26; 70pp; English.

XX The present invention provides a method for detecting the presence or
 CC absence of a single target molecule or target analyte (e.g. nucleic acid,
 CC protein, lipid, bacterium). The method involves contacting sample with
 CC one or more types of nanoparticle having target binding complements and
 CC detecting any light scattering complex formed. The nanoparticle probe
 CC complexes comprise two or more probes bound to a specific target analyte.
 CC The present sequence is a T20 diluent which is used in the preparation of
 CC aptamer-coated gold probes. Note: The present sequence is the SEQ ID NO:
 CC 26 which is given in the sequence listing. This sequence differs from the
 CC SEQ ID NO: 26 shown on page 21 in example 17 of the specification (see
 CC AED67970).

XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 652

AED67960
 ID AED67960 standard; DNA; 20 BP.

XX AC AED67960;

XX 12-JAN-2006 (first entry)

XX Deoxyadenosine spacer oligonucleotide SEQ ID NO: 31.

XX Analyte detection; DNA detection; protein detection; ss.

XX Unidentified.

XX US2005250094-A1.

XX 10-NOV-2005.

XX 22-NOV-2004; 2004US-00995051.

XX 30-MAY-2003; 2003US-0474569P.

XX 29-AUG-2003; 2003US-0499034P.

XX 04-NOV-2003; 2003US-0517450P.

XX 03-MAY-2004; 2004US-0567874P.

XX 27-MAY-2004; 2004US-00854848.

XX (NANO-) NANOSPHERE INC.

XX Storhoff JJ, Lucas A, Muller UR, Bao YP, Senical M, Garimella V;

XX WPI; 2005-784662/80.

XX Detecting target (e.g. nucleic acid, protein, lipid, bacterium) in
 PT sample, comprises contacting sample with one or more types of
 PT nanoparticle having target binding complements, and detecting any light
 PT scattering complex formed.

XX Disclosure; SEQ ID NO 31; 70pp; English.

XX The present invention provides a method for detecting the presence or
 CC absence of a single target molecule or target analyte (e.g. nucleic acid,
 CC protein, lipid, bacterium). The method involves contacting sample with
 CC one or more types of nanoparticle having target binding complements and
 CC detecting any light scattering complex formed. The nanoparticle probe
 CC complexes comprise two or more probes bound to a specific target analyte.
 CC The present sequence is a deoxyadenosine spacer oligonucleotide which is
 CC useful for detecting analytes based on evanescent illumination of the
 CC invention.

XX SQ Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAA 20

RESULT 653

```

AEE01383/c
ID AEE01383 standard; DNA; 20 BP.
XX
AC AEE01383;
XX
XX
XX 26-JAN-2006 (first entry)
XX
XX Universal oligonucleotide SEQ ID NO:33.
DE
XX
XX antibody; stem cell factor; probe; PCR; primer; ss.
XX
XX Synthetic.
XX
XX US2005261175-A1.
PN
XX
XX 24-NOV-2005.
PD
XX
XX 28-JAN-2003; 2003US-00353783.
PF
XX
XX 16-OCT-1989; 89US-00422383.
PR
XX 11-JUN-1990; 90US-00537198.
PR
XX 24-AUG-1990; 90US-00573616.
PR
XX 01-OCT-1990; 90US-00589701.
PR
XX 10-APR-1991; 91US-00684535.
PR
XX 25-NOV-1992; 92US-00982255.
PR
XX 21-DEC-1993; 93US-00173229.
PR
XX 24-MAY-1995; 95US-00448729.
PR
XX 21-AUG-2000; 2000US-00643659.
XX
XX (ZSEB/) ZSEBO K M.
PA
XX (BOSS/) BOSSELMAN R A.
PA
XX (SUGG/) SUGGS S V.
PA
XX (MART/) MARTIN F H.
PA
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI
XX WPI; 2005-796179/81.
DR
XX
XX New stem cell factor antibody, useful for treating hematopoietic
PT disorders such as anemia, leukemia, lymphoma, HIV, tuberculosis, or
PT malaria.
PT
XX
XX Example 3; SEQ ID NO 33; 217pp; English.
PS
XX
XX The invention relates to a purified antibody that is specifically
CC immunoreactive with a stem cell factor (SCF) or SCF receptor. Also
CC described: (1) a hybridoma cell line producing a monoclonal antibody that
CC is specifically immunoreactive with a SCF protein; (2) inhibiting the
CC activity of a mast cell population; (3) decreasing blood cell
CC proliferation, maturation or activity in a mammal; (4) decreasing
CC the interaction between a SCF and an SCF receptor in a cell population;
CC (5) treating a mammal having a disorder mediated through the interaction
CC of SCF with an SCF receptor; and (6) a pharmaceutical composition
CC comprising an antibody specifically immunoreactive with an SCF
CC polypeptide, and a pharmaceutical carrier, excipient, or diluent. The
CC antibody and methods are useful for inhibiting the activity of a mast
CC cell population, decreasing blood cell proliferation, maturation or
CC activity in a mammal, decreasing the interaction between a SCF and
CC an SCF receptor in a cell population, and treating a mammal having a
CC disorder mediated through the interaction of SCF with an SCF receptor.
CC The antibody, composition, and methods are useful for treating disorders,
CC e.g. hematopoietic disorders such as anemia, leukemia, lymphoma, HIV,
CC tuberculosis, or malaria. The present sequence represents a universal
CC oligonucleotide sequence which can be used as a probe or a PCR primer in
CC the amplification and sequencing of rat and human SCF, which is used in
CC an example from the present invention.
XX
XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
Db |||||
20 CTAATAAAAAAAAAAAAAAAAAA 1

RESULT 654
AED85822/c
ID AED85822 standard; DNA; 20 BP.
XX
AC AED85822;
XX
XX 12-JAN-2006 (first entry)
XX
XX Poly-thymine negative control probe SEQ ID NO: 7.
DE
XX
XX ss; biochip; p53 gene; tumor suppressor gene p53; DNA detection; probe.
XX
XX Synthetic.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
modified_base 20
/*tag= a
/mod_base= OTHER
/!note= "conjugated porous glass particle"
US2005254998-A1.
XX
XX 17-NOV-2005.
XX
XX 28-FEB-2005; 2005US-00066434.
XX
XX 01-MAR-2004; 2004JP-00056758.
PR
XX 12-AUG-2004; 2004JP-00235221.
XX
XX (EBAR ) EBARA CORP.
XX
XX Nakamura K, Abe M, Ogure N;
PI
XX WPI; 2006-016978/02.
DR
XX
XX Reactive detection chip e.g. DNA chip to recognize functional molecule in
PT genetic diagnosis, comprises spots formed by immobilizing porous
PT particles including probes in single-layered state on substrate, with
PT particles transparent to light.
XX
XX Example 1; SEQ ID NO 7; 26pp; English.
PS
XX
XX The present sequence is a negative control DNA probe used in the
CC validation of the novel reactive detection biochip which is the subject
CC of the invention. The present inventions relates to a novel reactive
CC detection chip comprising spots formed by immobilizing several porous
CC particles in a single-layered state on a substrate surface, where the
CC porous particles are transparent to incident light and have probe
CC molecules bound to surfaces of the particles and pores. Such chips are
CC useful in detecting molecules in a sample. In these chips, the number of
CC probes and spot thickness can be stably controlled and the three-
CC dimensional array of the probes makes the supply of sample to the probes
CC uniform. Thus, the magnitude of signal components is stabilized, and the
CC signal components are stably increased, consequently improving the signal
CC -to-noise ratio and enhancing the detection capability of the chip. The
CC chips are manufactured by forming a thermoplastic organic film on the
CC substrate, applying the porous particles in a spotted arrangement on the
CC organic film using a spotter (which is claimed), heating the substrate to
CC soften the organic film, embedding porous particles in the organic film
CC to immobilize the particles, and removing excess of porous particles
CC which are not immobilized. The use of spotter in chip manufacture
CC prevents agglomeration of the porous particles contained in the spotting
CC solution, maintains the dispersed state of porous particles without
CC adding any additive to the spotting solution, and thus enabling the chip
CC to be manufactured more efficiently.
XX
XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
```

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Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
DB 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 655
AEE60695/c
ID AEE60695 standard; DNA; 20 BP.
XX
AC AEE60695;
XX
DT 09-FEB-2006 (first entry)
XX
DE Universal stem cell factor PCR primer SEQ ID NO:33.
XX
KW hematopoiesis; stem cell factor; PCR; primer; ss.
XX
OS Synthetic.
XX
PN US6967029-B1.
XX
PD 22-NOV-2005.
XX
PF 21-AUG-2000; 2000US-00643659.
XX
PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449649.
XX
PA (AMGE-) AMGEN INC.
XX
PI Zeebo KM, Bosseman RA, Suggs SV, Martin FH;
XX
XX WPI; 2006-053612/06.
XX
XX Enhancing hematopoiesis in human, comprises expanding hematopoietic
PT progenitor cells by adding stem cell factor polypeptide to cells and
PT administering expanded cells to human.
XX
XX Example 3; SEQ ID NO 33; 213pp; English.
XX
XX The invention relates to a method (M1) for enhancing hematopoiesis in a
CC human or other subject. (M1) comprises: (a) obtaining hematopoietic
CC progenitor cells from the human or other subject; (b) expanding the cells
CC obtained in step (a) by adding to the cell a stem cell factor (SCF)
CC polypeptide having a 195, 208 or 245 amino acid sequence of AEE60706,
CC AEE60708 or AEE60725, or its biological active fragments that stimulate
CC growth of hematopoietic progenitor cells; and (c) administering to the
CC human or other subject the expanded hematopoietic progenitor cells
CC obtained in step (b), therefore restoring hematopoiesis to effect
CC hematological recovery in the human or other subject and enhancing
CC hematopoiesis in the human or other subject. Also described is a method
CC (M2) for expanding hematopoietic progenitor cells ex vivo, which
CC comprises: (a) obtaining hematopoietic progenitor cells from a donor; and
CC (b) expanding the cells obtained in step (a) by adding to the cells the
CC SCF polypeptide or its biological active fragments. (M1) is useful for
CC enhancing hematopoiesis in a human or other subject. (M2) is useful for
CC expanding hematopoietic progenitor cells, where the hematopoietic cells
CC are chosen from stem cells, lymphoid progenitor cells, myeloid progenitor
CC cells, megakaryocytes and erythroblasts. (M1) is useful for treating
CC various stem cell deficiencies such as aplastic anemia, paroxymal
CC nocturnal hemoglobinuria, myelofibrosis, myelosclerosis, Gaucher's
CC disease, Niemann-Pick disease, Hodgkin's disease, Kala-azar, sarcoidosis,
CC

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CC disseminated fungus disease, fulminating septicemia, malaria, vitamin
CC B12, and folic acid deficiency, pyridoxine deficiency, Diamond blackfan
CC anemia, hypopigmentation disorders such as piebaldism and vitiligo, and
CC AIDS. (M2) is useful in expanding early hematopoietic progenitors in
CC syngeneic, allogeneic or autologous bone marrow transplantation. (M1)
CC enhances hematopoiesis by expanding early hematopoietic progenitors. The
CC present sequence represents a universal PCR primer for SCF, which is used
CC in an example from the present invention.
XX
SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match      0.7%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2707 CTAATAAAAAAAAAAAAAA 2726
DB 20 CTAATAAAAAAAAAAAAAA 1

RESULT 656
AEF05127/c
ID AEF05127 standard; DNA; 20 BP.
XX
AC AEF05127;
XX
DT 23-MAR-2006 (first entry)
XX
DE Synthetic poly-T20 oligonucleotide SEQ ID NO:10.
XX
KW aptamer; analyte detection; ss.
XX
OS Synthetic.
XX
PN US2006014172-A1.
XX
PD 19-JAN-2006.
XX
PF 03-MAY-2005; 2005US-00121165.
XX
PR 03-MAY-2004; 2004US-0567874P.
PR 22-NOV-2004; 2004US-00995051.
XX
PA (NANO-) NANOSPHERE INC.
XX
PI Muller UR, Storhoff JJ, Senical MJ, Garimella V;
XX
XX WPI; 2006-099415/10.
XX
XX Novel aptamer probe comprising aptamer having oligonucleotide tail, and
PT oligonucleotide having sequence complementary to portion of sequence of
PT oligonucleotide tail having optional label, useful for detecting target
PT analyte in sample.
XX
XX Example 5; SEQ ID NO 10; 47pp; English.
XX
XX The invention relates to an aptamer probe (I) comprising an aptamer
CC having an oligonucleotide tail, and a second oligonucleotide having a
CC sequence complementary to at least a portion of a sequence of the
CC oligonucleotide tail comprising an optional label. Also described: (1)
CC detecting (M1) at least one target analyte having at least two binding
CC sites, in a sample; (2) a nanoparticle-aptamer conjugate probe (II)
CC comprising nanoparticles, and at least one type of aptamers being present
CC on the nanoparticle at a surface density ranging from between about
CC 1.0x10 10 and about 5.0x10 12 aptamers/cm2; (3) a substrate (III) for
CC detecting one or more target analytes comprising a substrate, at least
CC one type of capture aptamers bound to the substrate, where each type of
CC capture aptamers binds to the specific target analyte and arranged in an
CC array of discrete spots, and electrodes located between the discrete
CC spots; and (4) a kit (K1) for detecting one or more analytes in a sample
CC comprising (I) or (II) and an optional substrate. (I) is useful for
CC detecting one or more target analyte in a sample. The method is useful
CC for detecting at least one target analyte in a sample. The kit or

```

CC substrate are useful for detecting one or more analytes. (I) is useful in
 CC barcode detection assays and in therapeutic, diagnostic and target
 CC validation applications. (I) can be readily synthesized, manipulated and
 CC stored for long periods of time. (I) provides reproducibility in
 CC production. The present sequence represents a synthetic poly-T20
 CC oligonucleotide, which is used in the exemplification of the present
 CC invention.

XX Sequence 20 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 657

AEF05124

ID AEF05124 standard; DNA; 20 BP.

XX AEF05124;

AC AEF05124;

XX

DT 23-MAR-2006 (first entry)

XX

DE Synthetic poly-A20 oligonucleotide SEQ ID NO:7.

XX

KW aptamer; analyte detection; ss.

XX

OS Synthetic.

XX

US2006014172-A1.

XX

PD 19-JAN-2006.

XX

03-MAY-2005; 2005US-00121165.

XX

03-MAY-2004; 2004US-0567874P.

XX

22-NOV-2004; 2004US-00995051.

XX

(NANO-) NANOSPHERE INC.

XX

Muller UR, Storhoff JJ, Senical MJ, Garimella V;

XX

WPI; 2006-099415/10.

XX

Novel aptamer probe comprising aptamer having oligonucleotide tail, and
 oligonucleotide having sequence complementary to portion of sequence of
 oligonucleotide tail having optional label, useful for detecting target
 analyte in sample.

Example 4; SEQ ID NO 7; 47bp; English.

XX

The invention relates to an aptamer probe (I) comprising an aptamer
 having an oligonucleotide tail, and a second oligonucleotide having a
 sequence complementary to at least a portion of a sequence of the
 oligonucleotide tail comprising an optional label. Also described: (1)
 detecting (M1) at least one target analyte having at least two binding
 sites, in a sample; (2) a nanoparticle-aptamer conjugate probe (II)
 comprising nanoparticles, and at least one type of aptamers being present
 on the nanoparticle at a surface density ranging from between about
 1.0x10¹⁰ and about 5.0x10¹² aptamers/cm²; (3) a substrate (III) for
 detecting one or more target analytes comprising a substrate, at least
 one type of capture aptamers bound to the substrate, where each type of
 capture aptamers binds to the specific target analyte and arranged in an
 array of discrete spots, and electrodes located between the discrete
 spots; and (4) a kit (K1) for detecting one or more analytes in a sample
 comprising (I) or (II) and an optional substrate. (I) is useful for
 detecting one or more target analyte in a sample. The method is useful
 for detecting at least one target analyte in a sample. The kit or
 substrate are useful for detecting one or more analytes. (I) is useful in

CC barcode detection assays and in therapeutic, diagnostic and target
 CC validation applications. (I) can be readily synthesized, manipulated and
 CC stored for long periods of time. (I) provides reproducibility in
 CC production. The present sequence represents a synthetic poly-A20
 CC oligonucleotide, which is used in the exemplification of the present
 CC invention.

XX Sequence 20 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 658

REG11130/C

ID AEG11130 standard; DNA; 20 BP.

XX AEG11130;

AC AEG11130;

XX

DT 20-APR-2006 (first entry)

XX

DE Antisense oligonucleotide, SEQ ID NO: 1.

XX

KW Antisense oligonucleotide; phosphorothioate; 2'-O-methoxyethyl; 2'-MOE;

XX

OS Synthetic.

XX

OS Unidentified.

XX

Key Location/Qualifiers

FT modified_base 1..20

FT /tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone with 2'-O-methoxyethyl

XX (2'-MOE) nucleotides"

XX

US2006041115-A1.

XX

23-FEB-2006.

XX

15-MAR-2005; 2005US-00081880.

XX

14-JUN-2001; 2001US-00881535.

XX

02-SEP-2004; 2004US-00932630.

XX

(RAVI/) RAVIKUMAR V.

XX

Ravikumar V;

XX

WPI; 2006-210076/22.

XX

Preparing an internucleotide phosphorothioate linkage enriched in the Rp
 or Sp enantiomer comprises coupling the synthon to the 2'-substituted
 nucleoside in the presence of the coupling agent.

Example 4; SEQ ID NO 1; 25pp; English.

XX

The present invention relates to a method of preparing an internucleotide
 phosphorothioate linkage enriched in the Rp or Sp enantiomer between a
 synthon having a hydroxyl moiety at the 5' position and a 2'-substituted
 nucleoside having an activated phosphate moiety at the 3'-position
 comprises selecting a coupling agent having a pKa of 3.3-4.5 or 6.0-8.0
 and coupling the synthon to the 2'-substituted nucleoside in the presence
 of the coupling agent. The method and coupling agent of the invention are
 useful for preparing an internucleotide phosphorothioate linkage enriched
 in the Rp or Sp enantiomer between a synthon having a hydroxyl moiety at
 the 5' position and a 2'-substituted nucleoside having an activated
 phosphate moiety at the 3'-position. The present sequence is an antisense

XX PS Disclosure; Page 7; 1lpp; Japanese.

XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of

CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of

CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)

CC and using the aggregate of mRNAs as the template for each reverse

CC transcription primer; (b) digesting each of the prepared aggregates of

CC the double-stranded cDNAs with restriction enzyme and; (c)

CC electrophoresing the digested aggregate of cDNAs in separate lanes. The

CC method can be used to analyse gene expression rapidly and easily

XX SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 7e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2706 ACTAAAAA 2725

Db 20 ACTAAAAA 1

RESULT 662

ID AAQ90391 standard; DNA; 21 BP.

XX AC AAQ90391;

XX DT 08-JAN-1996 (first entry)

XX DE CP-1 (synthetic DNA probe with 3'ribonucleoside terminal #2).

XX CP-1; HLA; dQa; 3' ribonucleoside; self-addressable electronic device;

KW SAED; hybridisation; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT misc_feature 21

FT /*tag= a

FT /note= "3' ribonucleoside terminal"

XX WO9512808-A1.

XX 11-MAY-1995.

XX 26-OCT-1994; 94WO-US012270.

XX 01-NOV-1993; 93US-00146504.

XX (NANO-) NANOGEN INC.

XX Heller MJ, Tu E;

XX WPI; 1995-185870/24.

XX New self-addressable electronic devices - used for multi-step and

PT multiplex reactions such as DNA hybridisation(s), clinical diagnostics

PT and bio/polymer synthesis.

XX Example 1; Page 40; 86pp; English.

XX The sequences represented by, AAQ90390-90401 are synthetic DNA probes

CC containing 3' ribonucleoside termini. The sequences shown in AAQ90402-15

CC are synthetic DNA probes with 5' amino termini. These sequences were

CC specific for the polymorphisms of HLA gene dQa. The sequences were used

CC in the device of the invention. This is a self-addressable electronic

CC device (SAED) that can be used to carry out multi-step and multiplex

CC reactions, such as nucleic acid hybridisations. The advantages of this

CC method are that these reactions can be carried out with complete and

CC precise electronic control, and that the rate, specificity and

CC sensitivity of these reactions are greatly improved at micro-locations

XX SQ Sequence 21 BP; 20 A; 0 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 7e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAA 2728

Db 1 AAAAAA 20

RESULT 663

ID AAT10743 standard; RNA; 21 BP.

XX AC AAT10743;

XX DT 09-SEP-1996 (first entry)

XX DE Oligonucleotide probe, CP-1.

XX Electronically self-addressable device; ED; electrode; current source;

KW attachment layer; permeable; counterion; genetic typing; probe;

KW detection; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT modified_base 21

FT /*tag= a

FT /note= "3'-ribonucleoside terminus"

XX WO9601836-A1.

XX 25-JAN-1996.

XX 05-JUL-1995; 95WO-US008570.

XX 07-JUL-1994; 94US-00271882.

XX (NANO-) NANOGEN INC.

XX Heller MJ, Tu E, Evans GA, Sosnowski RG;

XX WPI; 1996-097582/10.

XX Electronically self-addressable device - used for electronic control of,

PT e.g. nucleic acid hybridisation.

XX Example 1; Page 60; 155pp; English.

XX The sequences given in AAT10742-67 are synthetic oligonucleotides which

CC are used in the construction of the electronically self-addressable

CC device (ED) of the invention. The ED comprises a substrate, an electrode

CC or opt. a number of electrodes supported by the substrate, a current

CC source operatively connected to the electrode and an attachment layer

CC adjacent to the electrode which is permeable to a counterion but not

CC permeable to a molecule capable of insulating or binding to the

CC electrode. The attachment layer is capable of attaching a macromolecule.

CC The ED is used for genetic typing and comprises a number of

CC electronically addressable locations each comprising an electrode, and a

CC binding entity, such as one of these probes, attached to each of the

CC locations capable of detecting the presence of a genetic sequence

XX SQ Sequence 21 BP; 20 A; 0 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 7e+02;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAA 2728

Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 664
AAX81302
ID AAX81302 standard; DNA; 21 BP.
XX
AC AAX81302;
XX
DT 20-AUG-1999 (first entry)
XX
DE 3' ribonucleoside oligonucleotide probe CP-1.
XX
KW Microelectronic device; multi-step reaction; microscopic format;
KW ion-permeable permeation layer; electrode; electrical control; transport;
KW attachment; binding; DNA/RNA hybrid; probe; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_RNA 21
FT /*tag= a
XX
PN W09929711-A1.
XX
PD 17-JUN-1999.
XX
XX 01-DEC-1998; 98WO-US025475.
XX
XX 05-DEC-1997; 97US-00986065.
XX
XX (NANO-) NANOGEN INC.
XX
XX Sosnowski RG, Butler WF, Tu E, Nerenberg MI, Heller MJ, Edman CF;
XX WPI; 1999-385567/32.
XX
XX New microelectronic device designed to carry out and control multi-step
PT and multiplex molecular biological reactions in microscopic format.
XX
XX Example 1; Page 89; 179pp; English.
XX
XX The specification describes a self-addressable, self-assembling
CC microelectronic device which is designed to actively carry out and
CC control multi-step and multiplex molecular biological reactions in
CC microscopic formats. A key aspect of this invention is played by the ion
CC -permeable permeation layer which overlies the electrode. This permeation
CC layer allows attachment of nucleic acids to permit immobilization but
CC also separates the attached oligonucleotides and hybridized target DNA
CC sequences from the highly reactive electrochemical environment generated
CC immediately at the electrode surface. The microelectronic device is
CC designed and fabricated to actively carry out and control reactions such
CC as nucleic acid hybridizations, antibody/antigen reactions, sample
CC preparation, diagnostics and biopolymer synthesis. The device can
CC electronically control the transport and attachment of specific binding
CC entities, such as nucleic acids and polypeptides, to specific micro-
CC locations. The device can subsequently control the transport and reaction
CC of analytes or reactants at the addressed specific micro-locations. The
CC device is able to concentrate analytes and reactants, remove non-
CC specifically bound molecules, provide stringency control for DNA
CC hybridization reactions and improve the detection of analytes. The
CC present sequence represents a probe used to exemplify the invention
XX
SQ Sequence 21 BP; 20 A; 0 C; 0 G; 0 T; 1 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 7e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||||
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 665
ADK01287/C
ID ADK01287 standard; DNA; 21 BP.
XX
AC ADK01287;
XX
DT 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #7.
XX
KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX
PN DE10208794-A1.
XX
PD 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 20; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 7e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTA##### 2726
DB 20 CTA##### 1

RESULT 666
ADK01285/c
ID ADK01285 standard; DNA; 21 BP.
XX
AC ADK01285;
DT 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #5.
XX
KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX
PN DE10208794-A1.
XX
PD 04-SEP-2003.
XX
PF 28-FEB-2002; 2002DE-01008794.
XX
PR 28-FEB-2002; 2002DE-01008794.
XX
PA (DEGS) DEGUSSA BIOACTIVES GMBH.
XX
PI Boekenkamp D, Dieck HT, Hoppe H;
XX
DR WPI; 2003-714082/68.
XX
PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
PS Example; Page 4; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 7e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTA##### 2726
DB 20 CTA##### 1

RESULT 667
ADK01286/c
ID ADK01286 standard; DNA; 21 BP.
XX
AC ADK01286;
XX
DT 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #6.
XX
KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX
PN DE10208794-A1.
XX
PD 04-SEP-2003.
XX
PF 28-FEB-2002; 2002DE-01008794.
XX
PR 28-FEB-2002; 2002DE-01008794.
XX
PA (DEGS) DEGUSSA BIOACTIVES GMBH.
XX
PI Boekenkamp D, Dieck HT, Hoppe H;
XX
DR WPI; 2003-714082/68.
XX
PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
PS Example; Page 5; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 7e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2726
|||||
Db 20 CTAATAAAAAAAAAAAAAA 1

RESULT 668
ADK01343/C
ID ADK01343 standard; DNA; 21 BP.

XX AC ADK01343;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #63.

XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX KW blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX FN DE10208794-A1.

XX PD 04-SEP-2003.

XX PF 28-FEB-2002; 2002DE-01008794.

XX PR 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp D, Dieck HT, Hoppe H;

XX DR WPI; 2003-714082/68.

PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.

XX PS Example; Page 6; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It

CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 1 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 7e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2728
|||||
Db 20 AAAAAAAAAAAAAAAAAA 1

RESULT 669

ADK01331/C

ID ADK01331 standard; DNA; 21 BP.

XX AC ADK01331;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #51.

XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX KW blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX FN DE10208794-A1.

XX PD 04-SEP-2003.

XX PF 28-FEB-2002; 2002DE-01008794.

XX PR 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp D, Dieck HT, Hoppe H;

XX DR WPI; 2003-714082/68.

PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.

XX PS Example; Page 5; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food

CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 7e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA AAAAAAAAAA 2727
 Db 20 TAAAAA AAAAAAAAAA 1

RESULT 670

ADK01329/c

ID ADK01329 standard; DNA; 21 BP.

XX AC ADK01329;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #49.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX PN DE10208794-A1.

XX PD 04-SEP-2003.

XX PF 28-FEB-2002; 2002DE-01008794.

XX PR 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp D, Dieck HT, Hoppe H;

XX DR WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX PS Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,

CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 7e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA AAAAAAAAAA 2727
 Db 20 TAAAAA AAAAAAAAAA 1

RESULT 671

ADK01332/c

ID ADK01332 standard; DNA; 21 BP.

XX AC ADK01332;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #52.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX PN DE10208794-A1.

XX PD 04-SEP-2003.

XX PF 28-FEB-2002; 2002DE-01008794.

XX PR 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp D, Dieck HT, Hoppe H;

XX DR WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX PS Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,

CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.
 XX
 SQ Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 7e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
 Db 20 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 672
 ADK01342/c
 ID ADK01342 standard; DNA; 21 BP.

XX AC ADK01342;

XX DT 06-MAY-2004 (first entry)

XX DE Rat DNA microarray capture oligonucleotide #62.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX OS Rattus sp.

XX PN DE10208794-A1.

XX PD 04-SEP-2003.

XX PF 28-FEB-2002; 2002DE-01008794.

XX PR 28-FEB-2002; 2002DE-01008794.

XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.

XX PI Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX PS Example; Page 6; 8pp; German.

XX CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture

CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.
 XX

SQ Sequence 21 BP; 0 A; 0 C; 1 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 7e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 673

ABD25908

ID ABD25908 standard; DNA; 21 BP.

XX AC ABD25908;

XX DT 29-JUL-2004 (first entry)

XX DE A1654215-derived oligonucleotide SEQ ID 4920.

XX Human; antitense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antisthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX OS Homo sapiens.

XX PN WO200285309-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013143.

XX PR 24-APR-2001; 2001US-0286036P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

PT Pharmaceutical composition for treating asthma, has antitense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

```

XX PS Claim 15; SEQ ID NO 4920; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies, asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 21 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 1 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
XX Db 1 AAAAAAAAAAAAAAAAAAAAAA 21
XX
XX RESULT 674
XX ABD25907
XX ID ABD25907 standard; DNA; 21 BP.
XX AC ABD25907;
XX XX
XX XX 29-JUL-2004 (first entry)
XX XX
XX XX A1654215-derived oligonucleotide SEQ ID 4919.
XX XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
XX surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
XX pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX

```

```

XX PA (EPIG-) EPIGENESIS PHARM INC.
XX PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX PI Miller S, Tang L, Shahabuddin S;
XX DR WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
XX nucleic acids associated with lung airway or lung dysfunction, and
XX bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4919; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
XX comprising oligonucleotides, effective for alleviating
XX bronchoconstriction, respiratory tract inflammation, allergies and
XX reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
XX surfactant depletion or hyposecretion, when administered to a mammal. The
XX oligonucleotides are derived from a gene encoding or regulating
XX expression of a target polypeptide associated with lung airway or lung
XX dysfunction or cancer and can be anti-sense to the corresponding mRNA.
XX The invention also describes a kit, that comprises: (a) a delivery
XX device, in separate containers, (b) the oligonucleotides, (c)
XX instructions for adding a carrier and for use of the kit. The composition
XX of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
XX analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
XX beta-adrenergic agonist. The composition is useful for preventing or
XX treating a respiratory, lung or malignant disease. The administered
XX composition comprises oligo and is administered to reduce the production
XX or availability, or to increase the degradation of the target mRNA or to
XX reduce the amount of target polypeptide present in the lungs. The
XX pulmonary obstruction, and/or surfactant hypoproduction are associated
XX with a disease or condition such as pulmonary vasoconstriction,
XX inflammation, allergies and/or asthma, impeded respiration, respiratory
XX distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
XX hypertension, emphysema, chronic obstructive pulmonary disease, cancer,
XX transplantation rejection, pulmonary infections, bronchitis or cancer.
XX The reduced adenosine content of the anti-sense oligos corresponding to
XX thymidines present in the target RNA serves to prevent the breakdown of
XX the oligonucleotides into products that free adenosine into the system
XX e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
XX prevent any unwanted effects due to it
XX
XX Sequence 21 BP; 20 A; 0 C; 0 G; 0 T; 0 U; 1 Other;
XX
XX Query Match 0.7%; Score 20; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
XX Db 1 AAAAAAAAAAAAAAAAAAAAAA 21
XX
XX RESULT 675
XX ADK67451/c
XX ID ADK67451 standard; DNA; 21 BP.
XX AC ADK67451;
XX XX
XX 06-MAY-2004 (first entry)
XX
XX Electrochemical detection intercalator-related DNA 1.
XX
XX intercalator; electrochemical detection; mismatch; ds.
XX
XX Synthetic.
XX
XX JP2004024114-A.
XX

```

PD 29-JAN-2004.
 XX
 PF 26-JUN-2002; 2002JP-00185555.
 XX
 PR 26-JUN-2002; 2002JP-00185555.
 XX
 PA (TAKE/) TAKENAKA S.
 PA (TUMK-) TUM KENKYUSHO KK.
 XX
 DR WPI; 2004-207136/20.
 XX
 PT Novel intercalator, useful as electrochemical double stranded DNA
 PT detection reagent.
 XX
 PS Example 1; Page 23; 24pp; Japanese.
 XX
 CC The invention relates to a novel intercalator having a specific formula.
 CC The intercalator of the invention may be useful for the electrochemical
 CC detection of a gene, as an electrochemical double stranded DNA detection
 CC reagent and as an intercalator for inhibiting the influence of mismatch
 CC DNA and single stranded DNA. The intercalator enables the transmission of
 CC electronic transition between two base pairs to occur efficiently. The
 CC current sequence is that of the electrochemical detection intercalator-
 CC related DNA 1 of the invention.
 XX
 SQ Sequence 21 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 1 Other;
 Query Match 0.7%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 7e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 21 AAAAAAAAAAAAAAAAAAAAAA 2
 RESULT 676
 ID AEB80248/c
 XX
 AC AEB80248;
 XX
 DT 06-OCT-2005 (first entry)
 XX
 DE RNA, SEQ ID NO: 6 used in sequencing nucleic acid.
 XX
 KW DNA sequencing; ss.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "Biotinylated"
 XX
 XX US2005170367-A1.
 XX
 PD 04-AUG-2005.
 XX
 PF 10-JUN-2004; 2004US-00866388.
 XX
 PR 10-JUN-2003; 2003US-0477426P.
 PR 10-JUN-2003; 2003US-0477429P.
 XX
 PA (QUAK/) QUAKE S R.
 PA (BUZB/) BUZBY P R.
 XX
 PI Quake SR, Buzby PR;
 XX
 DR WPI; 2005-553679/56.
 XX
 FT Novel fluorescently labeled nucleoside triphosphate, useful for

PT determining nucleic acid sequence of target nucleic acid.
 XX
 PS Disclosure; SEQ ID NO 6; 39pp; English.
 XX
 CC The present invention relates to fluorescently labeled nucleoside
 CC triphosphate. The invention is useful for determining nucleic acid
 CC sequence of target nucleic acid. The present sequence is a RNA used in
 CC sequencing nucleic acids.
 XX
 SQ Sequence 21 BP; 0 A; 1 C; 0 G; 0 T; 20 U; 0 Other;
 Query Match 0.7%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 7e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 677
 ID AAT92356/c
 XX
 AC AAT92356;
 XX
 DT 26-JAN-1998 (first entry)
 XX
 DE Amino modified oligodeoxyribonucleotide.
 XX
 KW Amino modified oligodeoxyribonucleotide; oligonucleotide;
 KW achiral linker reagent; 5-(aminomethyl)-1,3-benzenedimethanol;
 KW N-fluoresceinyl-(5-aminomethyl)-1,3-benzenedimethanol;
 KW hybridisation probe; PCR primer; nucleic acid sequencing;
 KW affinity matrix; cloning recombinant DNA; in-vitro mutagenesis; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_difference 11 /*tag= a
 FT /note= "n = 5-(aminomethyl)-1,3-benzenedimethanol"
 FT misc_difference 12 /*tag= b
 FT /note= "n = 5-(aminomethyl)-1,3-benzenedimethanol"
 XX
 PN WO9705156-A1.
 XX
 PD 13-FEB-1997.
 XX
 PF 26-JUL-1996; 96WO-DK000330.
 XX
 PR 27-JUL-1995; 95DK-00000863.
 XX
 PA (BEHR/) BEHRENS C.
 PA (PETE/) PETERSEN K H.
 PA (EGHO/) EGHOLM M.
 PA (NIEL/) NIELSEN J.
 PA (DAHL/) DAHL O.
 XX
 PI Behrens C, Petersen KH, Egholm M, Nielsen J, Dahl O;
 XX
 DR WPI; 1997-145615/13.
 XX
 PT New achiral linker reagents - useful for incorporation of multiple amino
 PT gps. or reporter gps. into oligonucleotide(s).
 XX
 PS Disclosure; Page 20; 42pp; English.
 XX
 CC Achiral linker reagents have been developed for the incorporation of
 CC multiple amino groups into oligonucleotides. The present sequence
 CC represents a modified oligodeoxyribonucleotide. The achiral linker
 CC reagents can be used for incorporation of multiple primary amino groups

CC or reporter groups into oligonucleotides. They are compatible with
 CC conventional DNA synthesis following the phosphoramidite methodology, and
 CC can be incorporated in good yields. The linker reagents may be used for
 CC labelling of oligonucleotides. They may also be used for preparation of
 CC oligonucleotides, e.g. for use as hybridisation probes, for use as
 CC primers in the polymerase chain reaction or in nucleic acid sequencing
 CC reactions, for production of affinity matrices for purification of DNA
 CC binding proteins or other biomolecules, for production of affinity
 CC matrices for detection of nucleic acid sequences, for cloning recombinant
 CC DNA or for in-vitro mutagenesis

XX
 SQ Sequence 22 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 2 Other;

Query Match 0.7%; Score 20; DB 1; Length 22;
 Best Local Similarity 90.9%; Pred. No. 7.2e+02;
 Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730

Db 22 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 678

ABK86172/C

ID ABK86172 standard; DNA; 24 BP.

XX AC ABK86172;

XX AC

XX 24-SEP-2002 (first entry)

XX DE

DE Oligo dT primer #4 used in method to study gene expression.

XX XX

XX Oligo dT primer; gene expression analysis; primer; ss.

XX KW

XX Synthetic.

XX OS

XX WO200236828-A2.

XX PN

XX 10-MAY-2002.

XX PD

XX 01-NOV-2001; 2001WO-US045401.

XX PF

XX 01-NOV-2000; 2000US-0244933P.

XX PR

XX (GENO-) GENOMIC SOLUTIONS INC.

XX PA

XX Kane MD, Dombkowski AA, Nagel AC;

XX PI

XX WPI; 2002-508123/54.

XX DR

XX Identifying and characterizing gene expression in samples, for
 PT identifying mRNAs expressed at different levels, comprises employing an
 PT identifier having an oligo-dT primer of a specific sequence and a
 PT detectable marker at its 5' end.

XX XX

PS Example 1; Page 15; 45pp; English.

XX XX

XX The invention relates to systems for identification and characterisation
 CC of gene expression in one or more samples, comprising an identifier having
 CC a specific oligo-dT primer sequence, where the identifier comprises a
 CC detectable marker at its 5' end. The system is useful for identifying any
 CC or all genes expressed in a given in vivo or in vitro RNA sample, as well
 CC as the relative differences in mRNA between 2 or more samples, where
 CC desired, for supporting discovery of new genes, and for identifying mRNAs
 CC that are expressed at different levels between 2 or more samples. The new
 CC system or method addresses limitations of prior methods by comprising
 CC compositions and systems that incorporate new strategies where molecular
 CC or biochemical assay compositions and systems are linked to DNA or RNA
 CC sequence databases for optimal resource efficiency in assaying gene
 CC expression. The system has the following advantages over existing
 CC methods: (a) prior sequence information or clone library construction is
 CC not needed to enable the assay; (b) provides immediate sequence
 CC information in addition to information concerning changes or differences

CC in mRNA level, to determine mRNA expression level and mRNA identification
 CC in one assay; (c) generates cDNA fragments from all mRNAs present in the
 CC sample for subsequent investigation by common molecular biology
 CC techniques; and (d) does not require prior knowledge of the sequence of
 CC the genome of the organism under investigation and can be employed in
 CC organisms lacking significant genomic sequence information. The present
 CC sequence represents an oligo dT primer used in the method of the
 CC invention

XX SQ Sequence 24 BP; 0 A; 0 C; 0 G; 20 T; 0 U; 4 Other;

Query Match 0.7%; Score 20; DB 1; Length 24;
 Best Local Similarity 100.0%; Pred. No. 7.5e+02;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 24 AAAAAAAAAAAAAAAAAAAAAA 5

RESULT 679

ADG75987/C

ID ADG75987 standard; DNA; 24 BP.

XX AC ADG75987;

XX AC

XX 11-MAR-2004 (first entry)

XX DT

XX Immunostimulatory non-CpG oligonucleotide IMT 059 SeqID 98.

XX DE

XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;

XX proliferation; differentiation; cytokine; antibody production; B-cell;

XX plasmacytoid dendritic cell; immunomodulator; gene therapy;

XX chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;

XX renal cell carcinoma.

XX KW

XX Synthetic.

XX OS

XX WO2003101375-A2.

XX PN

XX 11-DEC-2003.

XX PD

XX 30-MAY-2003; 2003WO-EP005691.

XX PF

XX 30-MAY-2002; 2002CA-02388049.

XX PR

XX (IMMU-) IMMUNOTECH SA.

XX PA

XX Lopez RA;

XX PI

XX WPI; 2004-053333/05.

XX DR

XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 PT acid sequence motif, useful for inducing B-cell activation, treating,
 PT preventing or ameliorating immune system disorder or tumoral disease e.g.
 PT melanoma.

XX PT

PS Disclosure; Fig 3; 139pp; English.

XX XX

XX This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
 CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primates, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present
 CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoural disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG

CC variant DNA oligo, used in an exemplification of the invention.

XX Sequence 24 BP; 0 A; 0 C; 4 G; 20 T; 0 U; 0 Other;

SQ Sequence 24 BP; 0 A; 0 C; 4 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 24;
Best Local Similarity 100.0%; Pred. No. 7.5e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 24 AAAAAAAAAAAAAAAAAAAAAA 5

RESULT 680

AD26900
ID AAD26900 standard; DNA; 25 BP.

XX AC AD26900;

XX DT 09-APR-2002 (first entry)

XX DE Bacterial PNP DNA fragment with an in-frame polyA tract.

XX KW Hypermutable organism; dominant negative allele; mismatch repair gene;
XX KW spontaneous mutation; DNA repair; purine nucleotide phosphorylase; PNP;
XX KW Bacteria; ss.

OS Bacteria.
OS Unidentified.
OS Chimeric.

XX Key Location/Qualifiers

FT misc_feature 1..5 /*tag= a
FT /*note= "Bacterial PNP gene"
FT misc_feature 6..25
FT /*tag= a
FT /*note= "In-frame polyA tract"

XX WO200188192-A2.

XX 22-NOV-2001.

XX 14-MAY-2001; 2001WO-US015376.

XX 17-MAY-2000; 2000US-0204769P.

XX (UYJO) UNIV JOHNS HOPKINS.

XX (MORP-) MORPHOTEK INC.

XX (NICO/) NICOLAIDES N C.

XX (SASS/) SASS P M.

XX (GRAS/) GRASSO L.

XX (VOGE/) VOGELSTEIN B.

XX (KINZ/) KINZLER K W.

XX Nicolaides NC, Sass PM, Grasso L, Vogelstein B, Kinzler KW;

XX WPI; 2002-083004/11.

XX Generating mutation in gene using cells which contain defective mismatch
XX repair gene, useful to generate genetically altered mutations with new
XX output traits.

XX Example 5; Fig 7; 59pp; English.

XX The patent discloses a method for generating hypermutable organisms.
XX Dominant negative alleles of human mismatch repair genes can be used to
XX generate hypermutable cells and organisms. They increase the rate of
XX spontaneous mutations by reducing the effectiveness of DNA repair and
XX thereby render the cells or animals hypermutable. The method is used to
XX produce genetically altered organisms to produce new output traits. The
XX present sequence is a bacterial poly purine nucleotide phosphorylase
XX (polyPNP) DNA fragment containing an in-frame polyA tract. This sequence

CC is used in the exemplification of the invention

XX Sequence 25 BP; 21 A; 1 C; 2 G; 1 T; 0 U; 0 Other;

SQ Sequence 25 BP; 21 A; 1 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
Db 6 AAAAAAAAAAAAAAAAAAAAAA 25

RESULT 681

ADH78589

ID ADH78589 standard; DNA; 25 BP.

XX AC ADH78589;

XX DT 22-APR-2004 (first entry)

XX DE Test element oligonucleotide #1.

XX KW Fluid functional property; fluid flow pattern;
XX KW fluid reagent distribution; time dependent fluid reactivity; ss.

XX OS Synthetic.

XX US2003232343-A1.

XX 18-DEC-2003.

XX 14-JUN-2002; 2002US-00172675.

XX 14-JUN-2002; 2002US-00172675.

XX (LEPR/) LEPROUST E M.

XX (AMOR/) AMORESE D A.

XX (PECK/) PECK B J.

XX Leproust EM, Amorese DA, Peck BJ;

XX WPI; 2004-061269/06.

XX Determining a functional property of fluid in chamber by introducing a
XX support comprising test elements having reaction and detection domains,
XX introducing a test fluid, and detecting locations not reactive with the
XX fluid.

XX Example 1; SEQ ID NO 1; 22pp; English.

XX The invention relates to a method of determining a functional property of
XX a fluid in a chamber comprising introducing into the chamber a support to
XX which is bound several test elements, each of the test elements
XX comprising a reaction domain and a detection domain, introducing into the
XX chamber a fluid that is interactive with the reaction domains, removing
XX the fluid from the chamber, determining by means of the detection domains
XX the locations at which the fluid has not interacted with the reaction
XX domains, and relating the locations to the functional property of the
XX fluid. The reaction domains involves nucleotides. The detection domain
XX comprises a member of a specific binding pair. The determining of the
XX step involves treating the test elements to modify only those reaction
XX domains that have interacted with the fluid. The functional property is
XX chosen from the flow pattern of the fluid, reagent distribution within
XX the fluid and time dependent reactivity of the fluid. The method is
XX useful for determining a functional property of a fluid in a chamber and
XX for synthesising arrays of biopolymers e.g., arrays of polynucleotides.
XX The method provides for the characterisation of a new fluid in a known
XX flow cell, a known fluid in a new flow cell or a new fluid/flow cell
XX combination. This sequence represents a test element used in the method
XX of the invention.

XX Sequence 25 BP; 19 A; 4 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 20; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 6 CTAAGAAAAA 25

RESULT 682
AED81293/c
ID AED81293 standard; DNA; 23 BP.
XX
AC AED81293;
XX
DT 26-JAN-2006 (first entry)
XX
DE IL-10 expression assay, test oligonucleotide SEQ ID No:51.
XX
KW pharmaceutical; therapeutic; immune stimulation; immune response;
KW allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
KW immunosuppressive; phosphorothioate; ss.
XX
OS Synthetic.
XX
PN WO2005111057-A2.
XX
PD 24-NOV-2005.
XX
PF 04-APR-2005; 2005WO-US011827.
XX
PR 02-APR-2004; 2004US-0558951P.
XX
PA (COLB-) COLEY PHARM GROUP INC.
PA (COLE-) COLEY PHARM GMBH.
XX
PI Krieg AM, Vollmer J;
XX
DR WPI; 2005-786756/80.
XX
PT New oligonucleotides, useful for treating an allergy or asthma, or an
PT autoimmune disease, arthritis, systemic lupus erythematosus, multiple
PT sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
XX
XX Example; SEQ ID NO 51; 111pp; English.

CC The invention relates to an oligonucleotide having the formula: (a) 5'
CC XN1YN2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
CC denotes the 3' end of the oligonucleotide, where X is a T or modified T
CC nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
CC nucleotide, and N1 and N2 are polynucleotides that do not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
CC polynucleotide consisting of the YZ dinucleotide and the N2
CC polynucleotide contains a number of nucleotides that is at most 45% of
CC the number of nucleotides in the oligonucleotide; and (b) 5' XN1YN2 3'
CC where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3'
CC end of the oligonucleotide, where X is a T or modified T nucleotide, Y is
CC a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
CC polynucleotide of 5-10 nucleotides, where N1 does not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
CC a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
CC pharmaceutical composition comprising the oligonucleotide in combination
CC with a therapeutic agent selected from chemotherapeutic agents,
CC radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
CC (2) a method of specifically increasing interleukin (IL)-10 expression
CC relative to interferon (IFN)-alpha expression in a subject, comprising
CC administering an oligonucleotide or a pharmaceutical composition to the
CC subject in need of increased IL-10 expression relative to IFN-alpha
CC expression; (3) a method of inducing an antigen-specific regulatory T
CC cell response in a subject by administering an immunostimulatory nucleic
CC acid or composition to a subject exposed to an antigen; (4) a method of
CC inducing an antigen-specific regulatory B cell response in a subject by

CC administering an immunostimulatory nucleic acid or composition to a
CC subject exposed to an antigen; (5) a method of treating an allergy or
CC asthma by exposing a subject to an allergen, and administering an
CC immunostimulatory nucleic acid or composition to the subject, where the
CC immunostimulatory nucleic acid or composition is administered in an
CC amount sufficient to prevent or alleviate an allergic response to the
CC allergen in the subject; (6) a method of treating an autoimmune disease
CC in a subject by exposing a subject to a self antigen, and administering
CC an immunostimulatory nucleic acid or composition to the subject, where
CC the immunostimulatory nucleic acid or composition is administered in an
CC amount sufficient to prevent or treat an autoimmune disease in the
CC subject; and (7) a method of reducing an antigen-specific response to an
CC implant in a subject by exposing a subject to an implant antigen, and
CC administering an immunostimulatory nucleic acid or composition to the
CC subject, where the immunostimulatory nucleic acid or composition is
CC administered in an amount sufficient to prevent or reduce an antigen-
CC specific response to the implant in the subject. The oligonucleotide
CC includes at least 1 modified internucleotide linkage such as a
CC phosphorothioate linkage. The oligonucleotide, methods and compositions
CC of the invention are useful for treating allergies, asthma, autoimmune
CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
CC disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
CC hepatitis, immune-mediated diabetes mellitus, Grave's disease,
CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune
CC disease of the adrenal gland, rheumatoid arthritis, scleroderma,
CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
CC an infection e.g. Lyme disease. This sequence represents an
CC oligonucleotide used in experiments in the examples of the present
CC invention.
XX
SQ Sequence 23 BP; 0 A; 1 C; 1 G; 21 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.8; DB 1; Length 23;
Best Local Similarity 91.3%; Pred. No. 7.5e+02;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 23 AAAAAAAAAACGAAAAAAAAA 1

RESULT 683
AAH44623/c
ID AAH44623 standard; DNA; 24 BP.
XX
AC AAH44623;
XX
DT 16-NOV-2001 (first entry)
XX
DE Human PD 17 PCR primer 2 SEQ ID NO:4.
XX
KW Human; PD 17; cytostatic; virucidal; immunomodulatory; haemostatic;
KW antiinflammatory; gene therapy; malignant tumour; haemopathy;
KW human immunodeficiency virus infection; HIV infection;
KW immunological disease; inflammation; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200164729-A1.
XX
PD 07-SEP-2001.
XX
PF 26-FEB-2001; 2001WO-CN000221.
XX
PR 02-MAR-2000; 2000CN-0011866.
XX
PA (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.


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XX
PI Mao Y, Xie Y;
XX
DR WPI; 2001-550164/61.
XX
PT New human polypeptide PD 17 for diagnosing and treating malignant tumor,
PT hemopathy, human immunodeficiency virus (HIV) infection, immunological
PT diseases and inflammations.
XX
PS Example 2; Page 11; 36pp; Chinese.
XX
CC The present invention describes the human PD 17 protein (I). (I) has
CC cytostatic, virucidal, immunomodulatory, antiinflammatory and haemostatic
CC activities. The polynucleotide encoding (I) can be used in gene therapy.
CC (I) and the polynucleotide encoding it are applicable in the diagnosis
CC and treatment of malignant tumour, haemopathy, human immunodeficiency
CC virus (HIV) infection, immunological diseases and various inflammations.
CC The present sequence represents a PCR primer for human PD 17, which is
CC used in an example from the present invention
XX
SQ Sequence 24 BP; 0 A; 2 C; 1 G; 21 T; 0 U; 0 Other;

Query Match      0.7%; Score 19.8; DB 1; Length 24;
Best Local Similarity 91.3%; Pred. No. 7.7e+02;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 23 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 684
ABN86902/c
ID ABN86902 standard; DNA; 24 BP.
AC
AC ABN86902;
XX
XX 23-JUL-2002 (first entry)
XX
DE Human macroprotein 21.78 PCR primer 2 SEQ ID NO:4.
XX
KW Human; macroprotein 21.78; embryo development teratogenesis; tumour;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
XX CN1331245-A.
XX
XX 16-JAN-2002.
XX
XX 30-JUN-2000; 2000CN-00116981.
XX
XX 30-JUN-2000; 2000CN-00116981.
XX
XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI Mao Y, Xie Y;
XX
XX WPI; 2002-292882/34.
XX
PT New polypeptide-human macroprotein 21.78 and polynucleotide encoding it,
PT for treating diseases such as embryo development teratogenesis and tumor.
XX
PS Example 2; Page 19 (Disclosure); 35pp; Chinese.
XX
CC The present invention describes human macroprotein 21.78 (I). Also
CC described is a process for preparing (I) using DNA recombination
CC techniques. (I) and the polynucleotide sequence encoding it (II) can be
CC used in the treatment of diseases such as embryo development
CC teratogenesis and tumours. The present sequence represents a PCR primer
CC for (I), which is used in an example from the present invention
XX
SQ Sequence 24 BP; 0 A; 1 C; 2 G; 21 T; 0 U; 0 Other;

```

```

Query Match      0.7%; Score 19.8; DB 1; Length 24;
Best Local Similarity 91.3%; Pred. No. 7.7e+02;
Matches 21; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2731
Db 23 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 685
AAQ75648/c
ID AAQ75648 standard; DNA; 21 BP.
XX
AC AAQ75648;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; lipp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match      0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
Db 21 TACAAAAAAAAAAAAAAAAAAAAA 1

RESULT 686
AAQ75675/c
ID AAQ75675 standard; DNA; 21 BP.
XX
AC AAQ75675;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;

```

```

KW aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 7; 1lpp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2707 CTAAAAAATAAAAAAAAAAAAAA 2727
Db 21 CTATAAAAAAAAAAAAAAAAAA 1

RESULT 687
AAQ75771/c
ID AAQ75771 standard; DNA; 21 BP.
XX AC AAQ75771;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 9; 1lpp; Japanese.
XX
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2707 CTAAAAAATAAAAAAAAAAAAAA 2727
Db 21 CTATAAAAAAAAAAAAAAAAAA 1

RESULT 688
AAQ75681/c
ID AAQ75681 standard; DNA; 21 BP.
XX AC AAQ75681;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 7; 1lpp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAATAAAAAAAAAAAAAA 2729
Db 21 AATAAAAAAAAAAAAAAAAAA 1

RESULT 689
AAQ75771/c
ID AAQ75771 standard; DNA; 21 BP.
XX AC AAQ75771;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 9; 1lpp; Japanese.
XX
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAATAAAAAAAAAAAAAA 2729
Db 21 AATAAAAAAAAAAAAAAAAAA 1

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AAQ75643/c
ID AAQ75643 standard; DNA; 21 BP.
XX
AC AAQ75643;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2727
Db 21 CTACAAAAAATAAAAAAAAAA 1

RESULT 690
AAQ75625/c
ID AAQ75625 standard; DNA; 21 BP.
XX
AC AAQ75625;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2727
Db 21 CTACAAAAAATAAAAAAAAAA 1

RESULT 690
AAQ75646/c
ID AAQ75646 standard; DNA; 21 BP.
XX
AC AAQ75646;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

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XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAATAAAAAAAAAA 2726
Db 21 ACTCAAAAAAATAAAAAAAAAA 1

RESULT 691
AAQ75646/c
ID AAQ75646 standard; DNA; 21 BP.
XX
AC AAQ75646;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

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CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX

SQ Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;

Best Local Similarity 95.2%; Pred. No. 7.6e+02;

Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2705 TACTAAAAA 2725

Db 21 TAATAAAAAA 1

RESULT 695

AAQ75716/c

ID AAQ75716 standard; DNA; 21 BP.

AC AAQ75716;

XX

DT 04-AUG-1995 (first entry)

XX

DE Reverse transcription primer used in cDNA analysis technique.

KW Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX

OS Synthetic.

XX

PN JP06303997-A.

XX

PD 01-NOV-1994.

XX

PF 16-APR-1993; 93JP-00112515.

XX

PR 16-APR-1993; 93JP-00112515.

XX

PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX

DR WPI; 1995-018287/03.

XX

PT Analysis of cDNA and gene expression - by amplification of mRNA followed

PT by digestion with restriction enzymes.

XX

PS Disclosure; Page 8; 11pp; Japanese.

XX

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)

CC and using the aggregate of mRNAs as the template for each reverse

CC transcription primer; (b) digesting each of the prepared aggregates of

CC the double-stranded cDNAs with restriction enzyme and; (c)

CC electrophoresing the digested aggregate of cDNAs in separate lanes. The

CC method can be used to analyse gene expression rapidly and easily
 XX

SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;

Best Local Similarity 95.2%; Pred. No. 7.6e+02;

Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2705 TACTAAAAA 2725

Db 21 TGCTAAAAA 1

RESULT 696

AAQ75649/c

ID AAQ75649 standard; DNA; 21 BP.

AC AAQ75649;

XX

DT 04-AUG-1995 (first entry)

XX

DE Reverse transcription primer used in cDNA analysis technique.

XX

KW Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

OS Synthetic.

PN JP06303997-A.

XX

PD 01-NOV-1994.

XX

PF 16-APR-1993; 93JP-00112515.

XX

PR 16-APR-1993; 93JP-00112515.

XX

PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX

DR WPI; 1995-018287/03.

XX

PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX

PS Disclosure; Page 6; 11pp; Japanese.

XX

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)

CC and using the aggregate of mRNAs as the template for each reverse

CC transcription primer; (b) digesting each of the prepared aggregates of

CC the double-stranded cDNAs with restriction enzyme and; (c)

CC electrophoresing the digested aggregate of cDNAs in separate lanes. The

CC method can be used to analyse gene expression rapidly and easily
 XX

SQ Sequence 21 BP; 0 A; 0 C; 1 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;

Best Local Similarity 95.2%; Pred. No. 7.6e+02;

Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAA 2729

Db 21 AAACAAAAA 1

RESULT 697

AAQ75776/c

ID AAQ75776 standard; DNA; 21 BP.

XX

AC AAQ75776;

XX

DT 04-AUG-1995 (first entry)

XX

DE Reverse transcription primer used in cDNA analysis technique.

XX

KW Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

OS Synthetic.

PN JP06303997-A.

XX

PD 01-NOV-1994.

XX

PF 16-APR-1993; 93JP-00112515.

XX

PR 16-APR-1993; 93JP-00112515.

XX


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OS Synthetic.
XX JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515;
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 9; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 0 A; 1 C; 0 G; 20 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AAAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 701
AAQ75616/c
ID AAQ75616 standard; DNA; 21 BP.
XX
XX AC AAQ75616;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 7; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
Db 21 TACTAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 703
AAQ75721/c
ID AAQ75721 standard; DNA; 21 BP.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 6; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of

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CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
Db 21 TACTAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 702
AAQ75696/c
ID AAQ75696 standard; DNA; 21 BP.
XX
XX AC AAQ75696;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 7; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19.4; DB 1; Length 21;
XX Best Local Similarity 95.2%; Pred. No. 7.6e+02;
XX Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
Db 21 TAGTAAAAAAAAAAAAAAAAAAAA 1
XX
RESULT 703
AAQ75721/c
ID AAQ75721 standard; DNA; 21 BP.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 6; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of

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XX AC AAQ75721;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX OS aggregate; restriction enzyme; ss.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX ST by digestion with restriction enzymes.
XX PS Disclosure; Page 8; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2726
Dn 21 ACTAAAAA 1

RESULT 704
AAQ75744/c
ID AAQ75744 standard; DNA; 21 BP.
XX AC AAQ75744;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX OS aggregate; restriction enzyme; ss.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.

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XX WPI; 1995-018287/03.
XX DT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 8; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2705 TACTAAAAA 2725
Dn 21 TACGAAAAA 1

RESULT 705
AAV35395
ID AAV35395 standard; DNA; 21 BP.
XX AC AAV35395;
XX DT 13-OCT-1998 (first entry)
XX DE HIV-1 gag protein DNA primer #8.
XX KW Hypervariable region; ENV protein; vaccinia virus; gag gene; retrovirus;
XX OS vaccines; infection; protection; primer; ss.
XX PN WO9822596-A1.
XX PD 28-MAY-1998.
XX PF 19-NOV-1997; 97WO-JP004216.
XX PR 19-NOV-1996; 96JP-00323412.
XX PA (NINA-) JAPAN NAT INST INFECTIOUS DISEASES.
XX PN (JAFG ) NIPPON ZEON KK.
XX PI Kojima A, Kurata T, Yasuda A;
XX DR WPI; 1998-312481/27.
XX PT Recombinant vaccinia virus containing fusion HIB gag gene - for
XX ST production in host cells of gag protein for use as vaccine.
XX PS Example 1; Page 66; 84pp; Japanese.
XX CC AAV35388-V35414 are primers used in a method which results in a
XX CC recombinant vaccinia virus comprising of a gag gene from a retrovirus
XX CC such as HIV-1 or HIV-2, fused to a DNA fragment containing an epitope
XX CC region (30-300 bases in length) of a retroviral gene other than the gag
XX CC gene. The gag gene may be altered so as to produce a gag protein modified
XX CC from the natural sequence by the addition, deletion or substitution of at
XX CC least 1 amino acid residue. The fusion gene is inserted into a region of
XX CC a vaccinia virus not essential to its propagation, to give a recombinant
XX CC vaccinia virus vector which is used to transform a host cell (such as
XX CC HeLa, Vero, VEF, rabbit kidney RK13 or human myeloma TK-143 cells). Upon

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XX AC AK01333;
XX XX
XX DT 06-MAY-2004 (first entry)
XX XX
XX DE Rat DNA microarray capture oligonucleotide #53.
XX XX
XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX KW blood; nerve; germ cell; food additive; food supplement.
XX XX
XX OS Rattus sp.
XX XX
XX PN DE10208794-A1.
XX XX
XX PD 04-SEP-2003.
XX XX
XX PF 28-FEB-2002; 2002DE-01008794.
XX XX
XX PR 28-FEB-2002; 2002DE-01008794.
XX XX
XX PA (DEGS) DEGUSSA BIOACTIVES GMBH.
XX XX
XX PI Boekenkamp D, Dieck HT, Hoppe H;
XX XX
XX DR WPI; 2003-714082/68.
XX XX
XX PT Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS Example; Page 5; 8pp; German.
XX XX
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-invariable anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acid in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX XX
XX SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
XX XX

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

RESULT 711
ADK01340/c
ID ADK01340 standard; DNA; 21 BP.
AC XX
AC ADK01340;
XX
XX 06-MAY-2004 (first entry)
DT XX
XX Rat DNA microarray capture oligonucleotide #60.
DE XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
KW XX
XX Rattus sp.
OS XX
XX DE10208794-A1.
PN XX
XX 04-SEP-2003.
PD XX
PF 28-FEB-2002; 2002DE-01008794.
XX XX
PR 28-FEB-2002; 2002DE-01008794.
XX XX
PA (DEGS) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
PI WPI; 2003-714082/68.
DR XX
XX
PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
PS Example; Page 6; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01340-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 0 A; 1 C; 0 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2728
 | | | | | | | | | | | | |
Db**** 21 TCAAAAAAAAAAAAAAAAAAAAAA 1

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QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
| | | | | | | | | | | | | | | |
Db 21 AGAAAAAAAAAAAAAAAAAAAAA 1

RESULT 712
ADK01284/C
ID ADK01284 standard; DNA; 21 BP.
XX
AC ADK01284;
XX
DT 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #4.
XX
ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX
FN DE10208794-A1.
XX
PD 04-SEP-2003.
XX
PF 28-FEB-2002; 2002DE-01008794.
XX
PR 28-FEB-2002; 2002DE-01008794.
XX
PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
PI Boekenkamp D, Dieck HT, Hoppe H;
XX
DR WPI; 2003-714082/68.
XX
PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
PS Example; Page 4; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
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Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAA 2726
| | | | | | | | | | | | | | | |
Db 21 ATTTAAAAAAAAAAAAAAAAAAAAA 1

RESULT 713
ADK01293/C
ID ADK01293 standard; DNA; 21 BP.
XX
AC ADK01293;
XX
DT 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #13.
XX
ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX
FN DE10208794-A1.
XX
PD 04-SEP-2003.
XX
PF 28-FEB-2002; 2002DE-01008794.
XX
PR 28-FEB-2002; 2002DE-01008794.
XX
PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
PI Boekenkamp D, Dieck HT, Hoppe H;
XX
DR WPI; 2003-714082/68.
XX
PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
PS Example; Page 5; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
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CC capture probes used in the method of the invention.
XX Sequence 21 BP; 2 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
    Query Match      0.7%; Score 19.4; DB 1; Length 21;
    Best Local Similarity 95.2%; Pred. No. 7.6e+02;
    Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAA AAAAAAAAAAAAAAAAAA 2728
Db 21 TATAA AAAAAAAAAAAAAAAAAA 1

RESULT 714
ADK01328/c
ID ADK01328 standard; DNA; 21 BP.
XX
AC ADK01328;
XX
DT 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #48.
XX
KW ss: hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX
FN DE10208794-A1.
XX
PD 04-SEP-2003.
XX
PF 28-FEB-2002; 2002DE-01008794.
XX
PR 28-FEB-2002; 2002DE-01008794.
XX
PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
PI Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX
PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
PS Example; Page 5; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It

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CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX Sequence 21 BP; 0 A; 1 C; 0 G; 20 T; 0 U; 0 Other;
SQ
    Query Match      0.7%; Score 19.4; DB 1; Length 21;
    Best Local Similarity 95.2%; Pred. No. 7.6e+02;
    Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAA AAAAAAAAAAAAAAAAAA 2729
Db 21 AAGAA AAAAAAAAAAAAAAAAAA 1

RESULT 715
ADK01337/c
ID ADK01337 standard; DNA; 21 BP.
XX
AC ADK01337;
XX
DT 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #57.
XX
KW ss: hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX
FN DE10208794-A1.
XX
PD 04-SEP-2003.
XX
PF 28-FEB-2002; 2002DE-01008794.
XX
PR 28-FEB-2002; 2002DE-01008794.
XX
PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
PI Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX
PT Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
PS Example; Page 6; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food

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CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX
 SQ Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
 Best Local Similarity 95.2%; Pred. No. 7.6e+02;
 Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATTTTTTTTTTTTTTTTTT 2728
 DB 21 TGAATTTTTTTTTTTTTTTTTT 1

RESULT 716
 ADK01282/c
 ID ADK01282 standard; DNA; 21 BP.

AC ADK01282;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #2.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

PN DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 4; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,

CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
 Best Local Similarity 95.2%; Pred. No. 7.6e+02;
 Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATTTTTTTTTTTTTTTTTT 2727
 DB 21 CTTAATTTTTTTTTTTTTTTTTT 1

RESULT 717

ADK01334/c

ID ADK01334 standard; DNA; 21 BP.

AC ADK01334;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #54.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

PN DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,

CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.
 XX
 SQ Sequence 21 BP; 0 A; 0 C; 2 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
 Best Local Similarity 95.2%; Pred. No. 7.6e+02;
 Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2727
 Db 21 CCAAAAAAAGAAAAA 1

RESULT 718
 ADK01296/c
 ID ADK01296 standard; DNA; 21 BP.
 XX
 AC ADK01296;
 XX
 XX 06-MAY-2004 (first entry)
 DT
 XX
 DE Rat DNA microarray capture oligonucleotide #16.
 XX
 KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.
 XX
 OS Rattus sp.
 XX
 XX DE10208794-A1.
 XX
 XX 04-SEP-2003.
 XX
 XX 28-FEB-2002; 2002DE-01008794.
 XX
 XX 28-FEB-2002; 2002DE-01008794.
 XX
 XX (DEGS) DEGUSSA BIOACTIVES GMBH.
 XX
 XX Boekenkamp D, Dieck HT, Hoppe H;
 XX
 XX WPI; 2003-714082/68.
 XX
 XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.
 XX
 XX Example; Page 5; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture

CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.
 XX

SQ Sequence 21 BP; 1 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19.4; DB 1; Length 21;
 Best Local Similarity 95.2%; Pred. No. 7.6e+02;
 Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAGAAAAA 2726
 Db 21 AATAAAAAAAGAAAAA 1

RESULT 719
 ADK01338/c
 ID ADK01338 standard; DNA; 21 BP.
 XX
 AC ADK01338;
 XX
 XX 06-MAY-2004 (first entry)
 DT
 XX
 DE Rat DNA microarray capture oligonucleotide #59.
 XX
 KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.
 XX
 OS Rattus sp.
 XX
 XX DE10208794-A1.
 XX
 XX 04-SEP-2003.
 XX
 XX 28-FEB-2002; 2002DE-01008794.
 XX
 XX 28-FEB-2002; 2002DE-01008794.
 XX
 XX (DEGS) DEGUSSA BIOACTIVES GMBH.
 XX
 XX Boekenkamp D, Dieck HT, Hoppe H;
 XX
 XX WPI; 2003-714082/68.
 XX
 XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.
 XX
 XX Example; Page 6; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture

CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
 Best Local Similarity 95.2%; Pred. No. 7.6e+02;
 Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2727
 Db 21 CGAAAAAAAAAAAAAAAAAAAA 1

RESULT 720
 ADK01320/c

ID ADK01320 standard; DNA; 21 BP.

AC ADK01320;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #40.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded

CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;

Best Local Similarity 95.2%; Pred. No. 7.6e+02;

Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAA 2726

Db 21 ACGAAAAAAAAAAAAAAAAA 1

RESULT 721

ADK01304/c

ID ADK01304 standard; DNA; 21 BP.

XX ADK01304;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #24.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.


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XX Example; Page 5; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (biomolecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acids in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 0 A; 0 C; 2 G; 19 T; 0 U; 0 Other;

Query Match          0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAATAAAAAAAAAA 2726
DB 21 ACCAAAAAATAAAAAAAAAA 1

RESULT 722
ADK01325/c
XX ID ADK01325 standard; DNA; 21 BP.
XX AC ADK01325;
XX
XX 06-MAY-2004 (first entry)
XX
XX Rat DNA microarray capture oligonucleotide #45.
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.

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XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (biomolecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acids in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match          0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2728
DB 21 TAGAAAAAATAAAAAAAAAA 1

RESULT 723
ADK01292/c
XX ID ADK01292 standard; DNA; 21 BP.
XX AC ADK01292;
XX
XX 06-MAY-2004 (first entry)
XX
XX Rat DNA microarray capture oligonucleotide #12.
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX PA

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XX PI Boekenkamp D, Dieck HT, Hoppe H;
XX DR WPI; 2003-714082/68.
XX PT Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS Example; Page 5; 8pp; German.
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-invariable anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acid in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX SQ Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2726
Db 21 AGTAAAAAAAAAAAAAAAAAAAAA 1

RESULT 724
ADK01312/c
XX ID ADK01312 standard; DNA; 21 BP.
XX AC ADK01312;
XX XT 06-MAY-2004 (first entry)
XX DE Rat DNA microarray capture oligonucleotide #32.
XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX KW blood; nerve; germ cell; food additive; food supplement.
XX OS Rattus sp.
XX XX DE10208794-A1.
XX PN 04-SEP-2003.
XX PD 28-FEB-2002; 2002DE-01008794.
XX PF

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XX PR 28-FEB-2002; 2002DE-01008794.
XX XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX PA Boekenkamp D, Dieck HT, Hoppe H;
XX PI WPI; 2003-714082/68.
XX XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS Example; Page 5; 8pp; German.
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-invariable anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acid in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX SQ Sequence 21 BP; 0 A; 0 C; 1 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 21 AACAAAAAAAAAAAAAAAAAAAAA 1

RESULT 725
ADK01298/c
XX ID ADK01298 standard; DNA; 21 BP.
XX AC ADK01298;
XX XT 06-MAY-2004 (first entry)
XX DE Rat DNA microarray capture oligonucleotide #18.
XX KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX KW blood; nerve; germ cell; food additive; food supplement.
XX OS Rattus sp.
XX XX DE10208794-A1.
XX PN 28-FEB-2002; 2002DE-01008794.
XX PF

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XX PD 04-SEP-2003.
XX PF 28-FEB-2002; 2002DE-01008794.
XX PR 28-FEB-2002; 2002DE-01008794.
XX PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX PI Boekenkamp D, Dieck HT, Hoppe H;
XX DR WPI; 2003-714082/68.
XX PF Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS Example; Page 5; 8pp; German.
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-invariable anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acid in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAAAAAA 2727
Db 21 CTCAAAAAATAAAAAAAAAAAAAA 1

RESULT 726
ADK01336/c
ID ADK01336 standard; DNA; 21 BP.
XX AC ADK01336;
XX 06-MAY-2004 (first entry)
XX Rat DNA microarray capture oligonucleotide #56.
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.

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XX OS Rattus sp.
XX PN DE10208794-A1.
XX XX 04-SEP-2003.
XX PD 28-FEB-2002; 2002DE-01008794.
XX PF 28-FEB-2002; 2002DE-01008794.
XX PR 28-FEB-2002; 2002DE-01008794.
XX PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX PI Boekenkamp D, Dieck HT, Hoppe H;
XX DR WPI; 2003-714082/68.
XX PF Sorting single-stranded nucleic acid, useful for analyzing expression
XX PT patterns and screening active agents, uses capture agent with variable
XX PT and constant regions.
XX PS Example; Page 6; 8pp; German.
XX CC This invention describes a novel method for sorting single-stranded
XX CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX CC reading out, where the nucleic acids are selectively bound using capture
XX CC agents that are (a) immobilised on the surface of a solid matrix and (b)
XX CC comprise variable and non-variable regions. The capture oligonucleotides
XX CC have a 5'-invariable anchor region, the complement of which is present at
XX CC least once in each nucleic acid and a 3'-variable, discriminatory region
XX CC that comprises all possible combinations of up to 10 nucleotides to allow
XX CC binding of particular sorts of single stranded nucleic acids. The capture
XX CC agents are particularly locked nucleic acids (LNA) and the anchor region
XX CC comprises a sequence of 10-50, particularly 15-25, T residues. The
XX CC capture oligonucleotides are biotinylated and immobilised on a surface by
XX CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX CC metal, resin, gel, crystalline material and/or membrane, having semi-
XX CC conducting properties and especially in the form of a chip. Its surface
XX CC is particularly a layer of (bio)molecular filaments and binding of single
XX CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX CC physical, stimulated by an electrical field or through a molecular sieve.
XX CC The method is used (i) for analysis of patterns, especially in mucosal,
XX CC hair root, blood, nerve or germ cells and (ii) for determining the
XX CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX CC additives or supplements, especially minerals, trace elements, organic
XX CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX CC mixtures. The method provides rapid, inexpensive and reproducible
XX CC representation of differences in pools of nucleic acids from cells. It
XX CC allows imaging of the complete pattern of all nucleic acid in a cell, and
XX CC can detect very small differences in the nucleic acid pool. Since the
XX CC method is based on comparison of nucleic acid pools, not individual
XX CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX CC capture probes used in the method of the invention.
XX SQ Sequence 21 BP; 0 A; 0 C; 1 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAATAAAAAAAAAAAAAA 2726
Db 21 ACAAAAAATAAAAAAAAAAAAAA 1

RESULT 727
ADW71579
ID ADW71579 standard; DNA; 21 BP.
XX AC ADW71579;
XX 21-APR-2005 (first entry)
XX

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```

DE Oligonucleotide DS21mer(C-C) .
XX DNA detection; ds.
XX Unidentified.
XX Key Location/Qualifiers
FH misc_feature 11 /*tag= a
FT /note= "Paired with a cytosine on the opposite strand via
FT Non-Watson-Crick base pairing"
XX
XX WO2005010177-A1.
XX
XX 03-FEB-2005.
XX
XX 20-JUL-2004; 2004WO-JP010300.
XX
XX 25-JUL-2003; 2003JP-00201500.
XX
XX 26-FEB-2004; 2004JP-00051320.
XX
XX (ONOA/) ONO A.
XX
XX Ono A;
XX
XX WPI; 2005-162557/17.
XX
XX Complex useful for detecting non-Watson Crick base pair in double
XX stranded DNA, comprises first and second single stranded nucleic acid or
XX its derivative and metal ion.
XX
XX Example 1; Page 32; 73pp; Japanese.
XX
XX The invention relates to a complex (C1) comprising a first and second
XX single stranded nucleic acid or its derivative and a metal ion, where the
XX first and second base of the strands forms a bond with metal ion. Also
XX included are detecting the existence of thymine-thymine, cytosine-
XX cytosine or cytosine-thymine base pair in a DNA or its analog (involving
XX melting DNA or its analog in an aqueous medium, processing the solution
XX for 3 minutes, to obtain three DNA solutions, dissolving Hg(II)2+ , Ag+
XX and combinations of Hg(II)2+ and Ag+ in the prepared DNA solutions, and
XX comparing the characteristics of the solution, where change in
XX characteristics in Hg(II)2+, Ag+ and combinations of Hg(II)2+ and Ag+
XX represents the existence of T-T base pair, C-C base pair and C-T base
XX pair in the respective DNA solutions) and an agent (Al) for detecting a
XX metal ion (comprising one or more DNA molecules or their analogs having a
XX metal binding region, where the coupling of metal ion is detected by
XX analyzing the characteristic change in DNA). The complex (C1) is useful
XX as a non-Watson Crick base pair metal complex or for detecting non-Watson
XX Crick base pair in a double stranded DNA. The complex (C1) enables to
XX detect non-Watson Crick base pair in a double stranded DNA. The present
XX sequence is a 21mer double stranded oligonucleotide with 1 Non-Watson-
XX Crick base paring.
XX
XX Sequence 21 BP; 20 A; 1 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 1 AAAAAAAAAACAAAAAAAAAAAAA 21

RESULT 728
ADW71578
ID ADW71578 standard; DNA; 21 BP.
XX
XX ADW71578;
XX
XX 21-APR-2005 (first entry)
XX

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DE Oligonucleotide DS21mer(T-T) .
XX DNA detection; ds.
XX Unidentified.
XX Key Location/Qualifiers
FH misc_feature 11 /*tag= a
FT /note= "Paired with a thymine on the opposite strand via
FT Non-Watson-Crick base pairing"
XX
XX WO2005010177-A1.
XX
XX 03-FEB-2005.
XX
XX 20-JUL-2004; 2004WO-JP010300.
XX
XX 25-JUL-2003; 2003JP-00201500.
XX
XX 26-FEB-2004; 2004JP-00051320.
XX
XX (ONOA/) ONO A.
XX
XX Ono A;
XX
XX WPI; 2005-162557/17.
XX
XX Complex useful for detecting non-Watson Crick base pair in double
XX stranded DNA, comprises first and second single stranded nucleic acid or
XX its derivative and metal ion.
XX
XX Example 1; Page 32; 73pp; Japanese.
XX
XX The invention relates to a complex (C1) comprising a first and second
XX single stranded nucleic acid or its derivative and a metal ion, where the
XX first and second base of the strands forms a bond with metal ion. Also
XX included are detecting the existence of thymine-thymine, cytosine-
XX cytosine or cytosine-thymine base pair in a DNA or its analog (involving
XX melting DNA or its analog in an aqueous medium, processing the solution
XX for 3 minutes, to obtain three DNA solutions, dissolving Hg(II)2+ , Ag+
XX and combinations of Hg(II)2+ and Ag+ in the prepared DNA solutions, and
XX comparing the characteristics of the solution, where change in
XX characteristics in Hg(II)2+, Ag+ and combinations of Hg(II)2+ and Ag+
XX represents the existence of T-T base pair, C-C base pair and C-T base
XX pair in the respective DNA solutions) and an agent (Al) for detecting a
XX metal ion (comprising one or more DNA molecules or their analogs having a
XX metal binding region, where the coupling of metal ion is detected by
XX analyzing the characteristic change in DNA). The complex (C1) is useful
XX as a non-Watson Crick base pair metal complex or for detecting non-Watson
XX Crick base pair in a double stranded DNA. The complex (C1) enables to
XX detect non-Watson Crick base pair in a double stranded DNA. The present
XX sequence is a 21mer double stranded oligonucleotide with 1 Non-Watson-
XX Crick base paring.
XX
XX Sequence 21 BP; 20 A; 0 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.4; DB 1; Length 21;
Best Local Similarity 95.2%; Pred. No. 7.6e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 1 AAAAAAAAAATAAAAAAAAAAAAA 21

RESULT 729
AED42748
ID AED42748 standard; RNA; 21 BP.
XX
XX AED42748;
XX
XX 15-DEC-2005 (first entry)
XX

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Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2727
Db 21 CGAAAAAAAAAAAAAAAAAAAAA 1

RESULT 731
AAZ00877/c
ID AAZ00877 standard; DNA; 24 BP.
XX AC AAZ00877;
XX XX
XX 27-SEP-1999 (first entry)
XX XX
XX PCR primer PGRT32 for PGI coding sequence.
XX XX
XX PGI gene; biallelic marker; PCR primer; PGI-related biallelic marker;
XX KW cancer; prostate cancer; diagnosis; therapy; prostate specific antigen;
XX KW PSA; human; ss.
XX XX
XX Synthetic.
XX OS Homo sapiens.
XX XX
XX WO9932644-A2.
XX PN
XX 01-JUL-1999.
XX PD
XX 22-DEC-1998; 98WO-18002133.
XX PF
XX 22-DEC-1997; 97US-00996306.
XX PR
XX 09-SEP-1998; 98US-0099658P.
XX PR
XX (GEST ) GENSET.
XX PA
XX Cohen D, Blumenfeld M, Chumakov I, Bougueleret L;
XX PI
XX WPI; 1999-405178/34.
XX DR
XX Use of a prostate cancer associated gene and biallelic markers derived
XX PT from it.
XX PT
XX Example 6; Page 42; 385pp; English.
XX PS
XX The invention relates to a mammalian PGI gene and protein, and a set of
XX CC PGI biallelic markers. The PGI polynucleotide and biallelic markers are
XX CC used in a hybridisation assay, a sequencing assay, or in an allele-
XX CC specific amplification assay for determining the identity of a nucleotide
XX CC at a PGI-related biallelic marker. The methods can be used to detect and
XX CC to assess the risk of developing cancer or prostate cancer. Early-stage
XX CC diagnosis of prostate cancer relies on prostate specific antigen (PSA)
XX CC dosage. However, the effectiveness of this is limited due to its
XX CC inability to discriminate between malignant and non-malignant affections
XX CC of the organ. A need exists for both a reliable diagnostic procedure
XX CC which would enable early-stage diagnosis, and for preventative and
XX CC curative treatments of the disease. The PGI gene can be used for
XX CC detection of prostate cancer, and the risk of developing it in the
XX CC future, and can also be used to determine therapies for the disease
XX CC
XX Sequence 24 BP; 3 A; 0 C; 1 G; 20 T; 0 U; 0 Other;
Query Match 0.7%; Score 19.4; DB 1; Length 24;
Best Local Similarity 95.2%; Pred. No. 8.1e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2708 TATAAAAAAAAAAAAAAAAAA 2728
Db 21 TCAAAAAAAAAAAAAAAAAA 1

RESULT 732
ABK12409
ID ABK12409 standard; DNA; 24 BP.
XX AC
XX 18-JUN-2002 (first entry)
XX DT
XX RT-PCR primer #1 for cDNA encoding polypeptide-laminin B210.67.
XX DE
XX Polypeptide-laminin B210.67; embryo development teratogenesis;
XX KW cytosolic; reverse transcriptase-PCR; RT-PCR; primer; ss.
XX KW
XX Unidentified.
XX OS
XX CN1328013-A.
XX PN
XX 26-DEC-2001.
XX PD
XX 14-JUN-2000; 2000CN-00116514.
XX PF
XX 14-JUN-2000; 2000CN-00116514.
XX PR
XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX PA
XX Mao Y, Xie Y;
XX PI
XX WPI; 2002-270054/32.
XX DR
XX Polypeptide-laminin B210.67, useful for treating diseases such as embryo
XX PT development teratogenesis.
XX PT
XX Example 2; Page 18 (disclosure); 33pp; Chinese.
XX PS
XX The present invention relates to the isolation of polypeptide-laminin
XX CC B210.67, and the polynucleotide encoding it. Also described is the
XX CC process for preparing the protein by DNA recombination. The polypeptide
XX CC is useful for treating diseases such as embryo development teratogenesis.
XX CC The present sequence for reverse transcriptase (RT)-PCR primer #1 is used
XX CC with RT-PCR primer #2 (ABK12410) for isolating cDNA encoding polypeptide-
XX CC laminin B210.67
XX CC
XX Sequence 24 BP; 19 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 0.7%; Score 19.4; DB 1; Length 24;
Best Local Similarity 95.2%; Pred. No. 8.1e+02;
Matches 20; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2727
Db 4 CTTAAAAAAAAAAAAAAAAA 24

RESULT 733
ABZ23536
ID ABZ23536 standard; DNA; 24 BP.
XX AC
XX ABZ23536;
XX XX
XX 07-APR-2003 (first entry)
XX DT
XX fragment of a plasmid used to detect somatic instability.
XX DE
XX Replication error; drug development; somatic instability; ss.
XX KW
XX Synthetic.
XX OS
XX Key Location/Qualifiers
XX FH misc_feature 4
XX FT /*tag= a
XX FT /note= "this base represents an unspecified number of
XX FT bases"
XX FT 21
XX FT misc_feature
XX FT /*tag= b
XX FT /note= "this base represents an unspecified number of
XX FT bases"
XX FT
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XX PN W0200295071-A2.
XX PD
XX PF 28-NOV-2002.
XX PF
XX PF 22-MAY-2002; 2002WO-NL000322.
XX PR
XX PR 22-MAY-2001; 2001EP-00201936.
XX PA (NEW-) KONINK NEDERLANDSE AKAD VAN WETENSCHAPPE.
XX PA (TIJS/) TIJSTERMAN M.
XX PI
XX PI Plasterk RHA, Tijsterman M;
XX XX
XX XX WPI; 2003-129440/12.
XX XX
XX PT Determining whether a product of a gene is involved in preventing a
XX PT replication error in a cell comprises providing a specific inhibitor for
XX PT the product and determining the level of expression of a marker gene.
XX PS
XX PS Example 1; Fig 3; 47pp; English.
XX CC
XX CC The specification describes a method for determining whether a product of
XX CC a gene is involved in preventing a replication error in a cell. The
XX CC method comprises providing the cell with a specific inhibitor for the
XX CC product and determining the level of functional expression of a marker
XX CC gene in the cell, where the level of expression of the marker gene is
XX CC dependent on the occurrence of the replication error. The method is used
XX CC for determining whether a product of a gene is involved in preventing a
XX CC replication error in a cell. The identified genes are useful for
XX CC developing diagnostic tools, or as targets for drug development to
XX CC manipulate cells on the basis of the presence or absence of function of
XX CC the gene. AB223535-36 represents fragments of plasmids used to detect
XX CC somatic instability, in the course of the invention
XX SQ Sequence 24 BP; 20 A; 0 C; 1 G; 1 T; 0 U; 2 Other;
XX
Query Match 0.7%; Score 19.4; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 8.1e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAATAAAAAATAAAAA 2730
Db 2 TGNAAAAAATAAAAAATAAAAAATAAAAA 24

RESULT 734
ADR44221
ID ADR44221 standard; DNA; 24 BP.
XX AC
XX AC ADR44221;
XX DT
XX DT 04-NOV-2004 (first entry)
XX XX
XX DE Caenorhabditis elegans heat-shock promoter DNA #2.
XX KW
XX KW Nematode; gene therapy; tumour; cancer; heat-shock promoter; ss.
XX OS
XX OS Caenorhabditis elegans.
XX FH
XX FH Key Location/Qualifiers
XX FT misc_feature 4
XX FT /*tag= a
XX FT /note= "N can be repeated X times"
XX FT misc_feature 21
XX FT /*tag= b
XX FT /note= "N can be repeated Y times"
XX FT
XX FT US2004161782-A1.
XX PN
XX PN 19-AUG-2004.
XX PD
XX PD 21-NOV-2003; 2003US-00719995.
XX PF

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XX PR 22-MAY-2001; 2001EP-00201936.
XX PR 22-MAY-2002; 2002WO-NL000322.
XX PR 28-NOV-2002; 2002WO-WO095071.
XX XX
XX XX (TIJS/) TIJSTERMAN M.
XX XX (PLAS/) PLASTERK R H A.
XX PI
XX PI Tijsterman M, Plasterk RHA;
XX XX
XX XX WPI; 2004-603554/58.
XX XX
XX PT Determining if a gene product/compound is involved in preventing
XX PT replication error in a cell, useful for treating cancer, comprises
XX PT determining expression level of a marker gene in a cell treated with a
XX PT gene product inhibitor/compound.
XX PS
XX PS Disclosure; Fig 3; 25pp; English.
XX CC
XX CC The present invention relates to a method for determining if a gene
XX CC product or compound is involved in preventing replication error in a
XX CC cell. The method involves providing a cell with a specific inhibitor for
XX CC a gene product or with a compound and determining the expression level of
XX CC a marker gene in the cell, where the expression level of the marker gene
XX CC is dependent on the occurrence of a replication error. The invention is
XX CC useful in gene therapy and for treating a subject having tumours or
XX CC cancer. The present sequence is a Caenorhabditis elegans heat-shock
XX CC promoter DNA. This sequence is used to illustrate the method of
XX CC invention.
XX SQ Sequence 24 BP; 20 A; 0 C; 1 G; 1 T; 0 U; 2 Other;
XX
Query Match 0.7%; Score 19.4; DB 1; Length 24;
Best Local Similarity 87.0%; Pred. No. 8.1e+02;
Matches 20; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAATAAAAAATAAAAA 2730
Db 2 TGNAAAAAATAAAAAATAAAAAATAAAAA 24

RESULT 735
ACC48482/C
ID ACC48482 standard; DNA; 21 BP.
XX AC
XX AC ACC48482;
XX DT
XX DT 11-AUG-2003 (first entry)
XX XX
XX DE Locked nucleic acid anchored oligo(I) primer ON12.
XX KW
XX KW Locked nucleic acid; LNA; gene therapy; primer; ss.
XX OS
XX OS Synthetic.
XX FH
XX FH Key Location/Qualifiers
XX FT modified_base 1
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 3
XX FT /*tag= b
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 5
XX FT /*tag= c
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 7
XX FT /*tag= d
XX FT /mod_base= OTHER
XX FT /note= "OTHER= locked nucleic acid"
XX FT modified_base 9
XX FT /note= "OTHER= locked nucleic acid"

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RESULT 737
AAF98935/c
ID   AAF98935 standard; DNA; 24 BP.
AC   AAF98935;
XX
DT   12-JUN-2001 (first entry)
XX
DE   Immunostimulatory nucleic acid #51.
XX
KW   Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW   immunostimulatory; tumour; viral infection; bacterial infection;
KW   fungal infection; parasitic infection; cancer; asthma;
KW   infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
OS   Synthetic.
XX
PN   WO200122972-A2.
XX
FD   05-APR-2001.
XX
PF   25-SEP-2000; 2000WO-US026383.
XX
PR   25-SEP-1999; 99US-0156113P.
PR   27-SEP-1999; 99US-01561135P.
PR   23-AUG-2000; 2000US-0227436P.
XX
XX   (IOWA ) UNIV IOWA RES FOUND.
PA   (COLE-) COLEY PHARM GMBH.
XX
PI   Krieg AM, Schetter C, Vollmer J;
XX
DR   WPI; 2001-273485/28.
XX
PT   Vaccinating against tumors, infectious diseases, allergies and asthma
PT   using immunostimulatory Py-rich and IG nucleic acids.
XX
PS   Disclosure; Page 39; 338pp; English.
XX
CC   The present invention relates to a method for stimulating an immune
CC   response. The method comprises administering an immunostimulatory nucleic
CC   acid to a non-rodent subject in sufficient quantity to stimulate an
CC   immune response. The present sequence is one such immunostimulatory
CC   nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC   (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
CC   against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
CC   and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC   haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC   staphylococcus), fungal antigens and/or parasitic antigens. The method is
CC   also useful for preventing cancer, asthma, infectious disease, allergy or
CC   immune deficiency. The present sequence can also be used to redirect a
CC   Th2 to a Th1 immune response and to activate immune cells. Note: the
CC   present sequence may have a phosphorothioate backbone
XX
SQ   Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;

Query Match      0.7%; Score 19.2; DB 1; Length 24;
Best Local Similarity 87.5%; Pred. No. 8.4e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
    ||||| ||||| ||||| ||||| |||||
Db 24 AAAAAACAACAAAAAACA 1

RESULT 738
ABA05517/c
ID   ABA05517 standard; DNA; 24 BP.
XX
AC   ABA05517;
XX
DT   22-FEB-2002 (first entry)
XX
PN   WO200253141-A2.

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XX Human Tre carcinogenic gene protein 10.56 PCR primer 2.
DE
XX Human; Tre carcinogenic gene protein 10.56; cytostatic; haemostatic;
KW virucide; immunomodulatory; antiinflammatory; gene therapy; cancer;
KW haemopathy; human immunodeficiency virus; HIV; infection;
KW immunological disease; inflammatory disorder; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200190131-A1.
XX
PD 29-NOV-2001.
XX
PF 21-MAY-2001; 2001WO-CN000833.
XX
PR 24-MAY-2000; 2000CN-00115824.
XX
PA (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC.
XX
PI Mao Y, Xie Y;
XX
DR WPI; 2002-083078/11.
XX
PT Human tre carcinogenic gene protein 10.56 and encoding polynucleotide,
PT used in diagnosis and treatment of malignant tumors, hemopathy, human
PT immunodeficiency virus infection, immunological diseases and
PT inflammation.
XX
PS Example 2; Page 17; 36pp; Chinese.
XX
CC The invention relates to an isolated polypeptide of human tre
CC carcinogenic gene protein 10.56 comprising a 96 residue amino acid
CC sequence, fully defined in the specification, or its fragment, analogue
CC or derivative. The polypeptide is useful in the diagnosis and treatment
CC of malignant tumors, haemopathy, human immunodeficiency virus (HIV)
CC infection, immunological diseases and various inflammatory disorders. The
CC present sequence is a primer used to amplify a polynucleotide encoding
CC the polypeptide of the invention
XX
SQ Sequence 24 BP; 0 A; 3 C; 0 G; 21 T; 0 U; 0 Other;

Query Match      0.7%; Score 19.2; DB 1; Length 24;
Best Local Similarity 87.5%; Pred. No. 8.4e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
    ||||| ||||| ||||| ||||| |||||
Db 24 AAAAAAAGAAAGAAAGAAAAA 1

RESULT 739
ABS77576/c
ID   ABS77576 standard; DNA; 24 BP.
XX
AC   ABS77576;
XX
DT 13-DEC-2002 (first entry)
XX
DE Angiogenesis inhibitory oligonucleotide #60.
XX
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubeosis; Oeler-Webber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophilic joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.
XX
OS Synthetic.
XX
PN WO200253141-A2.

```

XX PD 11-JUL-2002.
 XX PF 14-DEC-2001; 2001WO-US048458.
 XX PR 14-DEC-2000; 2000US-0255534P.
 XX PA (COLE-) COLEY PHARM GROUP INC.
 XX PI Bratzler RL;
 XX XX WPI; 2002-566690/60.
 XX XX Inhibiting angiogenesis in a subject, involves administering at least one
 PT antiangiogenic nucleic acid molecule to the subject.
 XX XX Claim 2; Page 20; 276pp; English.
 XX XX The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 SQ Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 740
 ABA99264/c
 ID ABA99264 standard; DNA; 24 BP.
 AC ABA99264;
 XX 08-MAY-2002 (first entry)
 DT Human tra oncogene 10-56 RT-PCR primer 2.
 DE
 XX Oncogene; tra oncogene 10.56; human; treatment; gene therapy; cytostatic;
 KW haemostatic; virucide; immunomodulatory; antiinflammatory; diagnosis;
 KW malignant tumour; haenopathy; human immunodeficiency virus;
 KW HIV infection; immunological disease; inflammation; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200200824-A2.
 PN 03-JAN-2002.
 XX
 XX 11-JUN-2001; 2001WO-CN000936.
 XX
 XX 12-JUN-2000; 2000CN-00116436.
 XX (BIOW-) BOWINDOW GENE DEV INC SHANGHAI.
 XX MAO Y, Xie Y;
 PI
 XX

DR WPI; 2002-075668/10.
 XX human tra oncogene 10.56 and encoding polynucleotide, used in diagnosis
 PT and treatment of malignant tumors, hemopathy, human immunodeficiency
 PT virus infection, immunological diseases and inflammation.
 XX
 XX Example 2; Page 12; 32pp; Chinese.
 XX
 CC This invention describes a novel human tra oncogene 10.56 which has
 CC cytostatic, haemostatic, virucide, immunomodulatory and antiinflammatory
 CC activity and can be used for gene therapy. The polypeptide of the
 CC invention and its encoding polynucleotide are used in diagnosis and
 CC treatment of malignant tumors, haemopathy, human immunodeficiency virus
 CC (HIV) infection, immunological diseases and various inflammations. This
 CC sequence represents an RT-PCR primer used in the amplification of the
 CC human tra oncogene 10.56 gene which is described in the disclosure of the
 CC invention
 XX
 SQ Sequence 24 BP; 0 A; 3 C; 0 G; 21 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 741
 ABK13715/c
 ID ABK13715 standard; DNA; 24 BP.
 XX
 AC ABK13715;
 XX
 DT 23-APR-2002 (first entry)
 XX
 DE RT-PCR primer #2 for human transcriptional activation subunit 14 cDNA.
 XX
 KW Human; transcriptional activation subunit 14; malignant neoplasm;
 KW haematopathy; cytostatic; HIV infection; human immunodeficiency virus;
 KW immunological disease; inflammation; virucide; immunomodulatory;
 KW antiinflammatory; reverse transcriptase-PCR; RT-PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200194403-A1.
 PN 13-DEC-2001.
 PD
 XX 14-MAY-2001; 2001WO-CN000753.
 PF
 XX 16-MAY-2000; 2000CN-00115720.
 PR (SHAN-) SHANGHAI BOWINDOW GENE DEV INC.
 XX
 XX MAO Y, Xie Y;
 XX
 XX WPI; 2002-090139/12.
 DR
 XX Human transcriptional activation subunit 14 and encoding polynucleotide,
 PT used in diagnosis and treatment of malignant tumors, hemopathy, human
 PT immunodeficiency virus infection, immunological diseases and
 PT inflammation.
 XX
 XX Example 2; Page 17; 36pp; Chinese.
 PS
 XX The present invention relates to the isolation of human transcriptional
 CC activation subunit 14, and the polynucleotide encoding it. Also described
 CC is the process for preparing the protein by DNA recombination and the
 CC application of the polypeptide and polynucleotide in treating various
 CC diseases such as malignant neoplasms, haematopathy, human
 CC immunodeficiency virus (HIV) infection, immunological diseases, and

PT New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 PT acid sequence motif, useful for inducing B-cell activation, treating,
 PT preventing or ameliorating immune system disorder or tumoral disease e.g.
 PT melanoma.

PS Claim 14; SEQ ID NO 24; 139pp; English.

XX
 PS This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
 CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primate, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present
 CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoral disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
 CC variant DNA oligo, used in an exemplification of the invention.

XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732

Db 24 AAAAAAAAAAATGAAAAAAAAA 1

RESULT 747

ADG75924/C
 ID ADG75924 standard; DNA; 24 BP.

XX AC ADG75924;

XX DT 11-MAR-2004 (first entry)

XX DE Immunostimulatory non-CpG oligonucleotide IMT 179 SeqID 26.

XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
 KW proliferation; differentiation; cytokine; antibody production; B-cell;
 KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
 KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
 KW renal cell carcinoma.

XX OS Synthetic.

XX WO2003101375-A2.

XX PD 11-DEC-2003.

XX PF 30-MAY-2003; 2003WO-EP005691.

XX PR 30-MAY-2002; 2002CA-02388049.

XX PA (IMMU-) IMMUNOTECH SA.

XX PI Lopez RA;

XX DR WPI; 2004-053333/05.

XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 PT acid sequence motif, useful for inducing B-cell activation, treating,
 PT preventing or ameliorating immune system disorder or tumoral disease e.g.
 PT melanoma.

XX Claim 14; SEQ ID NO 26; 139pp; English.

XX

CC This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
 CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primate, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present
 CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoral disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
 CC variant DNA oligo, used in an exemplification of the invention.

XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732

Db 24 AAAAAAAAAAATGAAAAAAAAA 1

RESULT 748

ADG76001/C
 ID ADG76001 standard; DNA; 24 BP.

XX AC ADG76001;

XX DT 11-MAR-2004 (first entry)

XX DE Non-CpG DNA oligonucleotide 2.

XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
 KW proliferation; differentiation; cytokine; antibody production; B-cell;
 KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
 KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
 KW renal cell carcinoma.

XX OS Synthetic.

XX WO2003101375-A2.

XX PD 11-DEC-2003.

XX PF 30-MAY-2003; 2003WO-EP005691.

XX PR 30-MAY-2002; 2002CA-02388049.

XX PA (IMMU-) IMMUNOTECH SA.

XX PI Lopez RA;

XX DR WPI; 2004-053333/05.

XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 PT acid sequence motif, useful for inducing B-cell activation, treating,
 PT preventing or ameliorating immune system disorder or tumoral disease e.g.
 PT melanoma.

XX Example 17; Page 80; 139pp; English.

CC This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
 CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primate, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present

CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoural disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is a non-CpG DNA oligo of the
 CC invention.

XX
 SQ Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAACAAAAAACAA 1

RESULT 749
 ADG76035/C
 ID ADG76035 standard; DNA; 24 BP.

XX
 AC ADG76035;

XX
 DT 11-MAR-2004 (first entry)

XX
 DE Non-CpG DNA oligonucleotide 36.

XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
 KW proliferation; differentiation; cytokine; antibody production; B-cell;
 KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
 KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
 KW renal cell carcinoma.

XX
 OS Synthetic.

XX
 PN WO2003101375-A2.

XX
 PD 11-DEC-2003.

XX
 PF 30-MAY-2003; 2003WO-EP005691.

XX
 PR 30-MAY-2002; 2002CA-02388049.

XX
 PA (IMMU-) IMMUNOTECH SA.

XX
 PI Lopez RA;

XX
 PS WPI; 2004-053333/05.

XX
 CC New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 CC acid sequence motif, useful for inducing B-cell activation, treating,
 CC preventing or ameliorating immune system disorder or tumoral disease e.g.
 CC melanoma.

XX
 PS Example 17; Page 81; 139pp; English.

XX
 CC This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
 CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primate, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present
 CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoural disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is a non-CpG DNA oligo of the

CC invention.

XX
 SQ Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
 Db 24 AAAAAAAAAACAAAAAACAA 1

RESULT 750
 ADG75919/C
 ID ADG75919 standard; DNA; 24 BP.

XX
 AC ADG75919;

XX
 DT 11-MAR-2004 (first entry)

XX
 DE Immunostimulatory non-CpG oligonucleotide IMT 174 SeqID 21.

XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
 KW proliferation; differentiation; cytokine; antibody production; B-cell;
 KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
 KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
 KW renal cell carcinoma.

XX
 OS Synthetic.

XX
 PN WO2003101375-A2.

XX
 PD 11-DEC-2003.

XX
 PF 30-MAY-2003; 2003WO-EP005691.

XX
 PR 30-MAY-2002; 2002CA-02388049.

XX
 PA (IMMU-) IMMUNOTECH SA.

XX
 PI Lopez RA;

XX
 PS WPI; 2004-053333/05.

XX
 CC New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 CC acid sequence motif, useful for inducing B-cell activation, treating,
 CC preventing or ameliorating immune system disorder or tumoral disease e.g.
 CC melanoma.

XX
 PS Claim 14; SEQ ID NO 21; 139pp; English.

XX
 CC This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
 CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primate, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present
 CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoural disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
 CC variant DNA oligo, used in an exemplification of the invention.

XX
 SQ Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 24 AAAAAAAAAAAAAAAAAACAAATGAA 1

RESULT 751
ADG75971/c
ID ADG75971 standard; DNA; 24 BP.
XX AC
XX AC
XX ADG75971;
XX 11-MAR-2004 (first entry)
XX Immunostimulatory non-CpG phosphorothioate DNA oligo IMT179 SeqID73.
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
XX proliferation; differentiation; cytokine; antibody production; B-cell;
XX plasmacytoid dendritic cell; immunomodulator; gene therapy;
XX chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
XX renal cell carcinoma.
XX Synthetic.
XX WO2003101375-A2.
XX 11-DEC-2003.
XX 30-MAY-2003; 2003WO-EP005691.
XX 30-MAY-2002; 2002CA-02388049.
XX (IMMU-) IMMUNOTECH SA.
XX Lopez RA;
XX WPI; 2004-053333/05.
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
XX acid sequence motif, useful for inducing B-cell activation, treating,
XX preventing or ameliorating immune system disorder or tumoral disease e.g.
XX melanoma.
XX Example 5; SEQ ID NO 73; 139pp; English.
XX This invention relates to novel immunostimulatory oligonucleotides that
XX contain a non-palindromic sequence motif. Specifically, it refers to DNA
XX oligonucleotides (without a CpG motif), which can stimulate an immune
XX response in animals of the order of primates, including humans. The immune
XX response is characterised by the proliferation, differentiation, cytokine
XX and antibody production in B-cells, as well as cell differentiation and
XX cytokine production in plasmacytoid dendritic cells. The present
XX invention describes immunomodulator compositions that also comprise an
XX antigen selected from, for example, viruses, bacteria, parasites, tumour
XX cells and glycolipids. As such, these DNA oligos can be used in gene
XX therapy for inducing B-cell activation, treating, preventing or
XX ameliorating an immune system disorder or a tumoural disease including
XX chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
XX carcinoma. This oligonucleotide sequence is an immunostimulatory
XX phosphorothioate non-CpG variant DNA oligo, used to determine the effect
XX of oligo size on B cell proliferation and IL6 secretion in an
XX exemplification of the invention.
XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 19.2; DB 1; Length 24;
XX Best Local Similarity 87.5%; Pred. No. 8.4e+02;
XX Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 24 AAAAAAAAAATGAAAAAAAAAAAA 1

RESULT 752
ADG75920/c
ID ADG75920 standard; DNA; 24 BP.
XX AC
XX AC
XX ADG75920;
XX 11-MAR-2004 (first entry)
XX Immunostimulatory non-CpG oligonucleotide IMT 175 SeqID 22.
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
XX proliferation; differentiation; cytokine; antibody production; B-cell;
XX plasmacytoid dendritic cell; immunomodulator; gene therapy;
XX chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
XX renal cell carcinoma.
XX Synthetic.
XX WO2003101375-A2.
XX 11-DEC-2003.
XX 30-MAY-2003; 2003WO-EP005691.
XX 30-MAY-2002; 2002CA-02388049.
XX (IMMU-) IMMUNOTECH SA.
XX Lopez RA;
XX WPI; 2004-053333/05.
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
XX acid sequence motif, useful for inducing B-cell activation, treating,
XX preventing or ameliorating immune system disorder or tumoral disease e.g.
XX melanoma.
XX Claim 14; SEQ ID NO 22; 139pp; English.
XX This invention relates to novel immunostimulatory oligonucleotides that
XX contain a non-palindromic sequence motif. Specifically, it refers to DNA
XX oligonucleotides (without a CpG motif), which can stimulate an immune
XX response in animals of the order of primates, including humans. The immune
XX response is characterised by the proliferation, differentiation, cytokine
XX and antibody production in B-cells, as well as cell differentiation and
XX cytokine production in plasmacytoid dendritic cells. The present
XX invention describes immunomodulator compositions that also comprise an
XX antigen selected from, for example, viruses, bacteria, parasites, tumour
XX cells and glycolipids. As such, these DNA oligos can be used in gene
XX therapy for inducing B-cell activation, treating, preventing or
XX ameliorating an immune system disorder or a tumoural disease including
XX chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
XX carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
XX variant DNA oligo, used in an exemplification of the invention.
XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 19.2; DB 1; Length 24;
XX Best Local Similarity 87.5%; Pred. No. 8.4e+02;
XX Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 24 AAAAAAAAAACAAATGAAAA 1

RESULT 753
ADG75923/c
ID ADG75923 standard; DNA; 24 BP.
XX AC
XX ADG75923;

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DT 11-MAR-2004 (first entry)
XX
DE Immunostimulatory non-CpG oligonucleotide IMT 178 SeqID 25.
XX
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
KW proliferation; differentiation; cytokine; antibody production; B-cell;
KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
KW renal cell carcinoma.
XX
XX Synthetic.
XX
XX WO2003101375-A2.
XX
XX 11-DEC-2003.
XX
XX 30-MAY-2003; 2003WO-EP005691.
XX
XX 30-MAY-2002; 2002CA-02388049.
XX
XX (IMMU-) IMMUNOTECH SA.
XX
XX Lopez RA;
XX
XX WPI; 2004-053333/05.
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
XX acid sequence motif, useful for inducing B-cell activation, treating,
XX preventing or ameliorating immune system disorder or tumoral disease e.g.
XX melanoma.
XX
XX Claim 14; SEQ ID NO 25; 139pp; English.
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
XX contain a non-palindromic sequence motif. Specifically, it refers to DNA
XX oligonucleotides (without a CpG motif), which can stimulate an immune
XX response in animals of the order of primates, including humans. The immune
XX response is characterised by the proliferation, differentiation, cytokine
XX and antibody production in B-cells, as well as cell differentiation and
XX cytokine production in plasmacytoid dendritic cells. The present
XX invention describes immunomodulator compositions that also comprise an
XX antigen selected from, for example, viruses, bacteria, parasites, tumour
XX cells and glycolipids. As such, these DNA oligos can be used in gene
XX therapy for inducing B-cell activation, treating, preventing or
XX ameliorating an immune system disorder or a tumoural disease including
XX chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
XX carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
XX variant DNA oligo, used in an exemplification of the invention.
XX
XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19.2; DB 1; Length 24;
XX Best Local Similarity 87.5%; Pred. No. 8.4e+02;
XX Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 24 AAAAAAAAAACAAATGAAAAAAAA 1

RESULT 754
ADG75921/c
ID ADG75921 standard; DNA; 24 BP.
XX
XX ADG75921;
XX
XX 11-MAR-2004 (first entry)
XX
XX Immunostimulatory non-CpG oligonucleotide IMT 176 SeqID 23.
XX
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
KW proliferation; differentiation; cytokine; antibody production; B-cell;
KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
KW

DT 11-MAR-2004 (first entry)
XX
DE Immunostimulatory non-CpG oligonucleotide IMT 178 SeqID 25.
XX
XX ss; non-CpG; immunostimulatory; non-palindromic; immune response;
KW proliferation; differentiation; cytokine; antibody production; B-cell;
KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
KW renal cell carcinoma.
XX
XX Synthetic.
XX
XX WO2003101375-A2.
XX
XX 11-DEC-2003.
XX
XX 30-MAY-2003; 2003WO-EP005691.
XX
XX 30-MAY-2002; 2002CA-02388049.
XX
XX (IMMU-) IMMUNOTECH SA.
XX
XX Lopez RA;
XX
XX WPI; 2004-053333/05.
XX
XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
XX acid sequence motif, useful for inducing B-cell activation, treating,
XX preventing or ameliorating immune system disorder or tumoral disease e.g.
XX melanoma.
XX
XX Claim 14; SEQ ID NO 25; 139pp; English.
XX
XX This invention relates to novel immunostimulatory oligonucleotides that
XX contain a non-palindromic sequence motif. Specifically, it refers to DNA
XX oligonucleotides (without a CpG motif), which can stimulate an immune
XX response in animals of the order of primates, including humans. The immune
XX response is characterised by the proliferation, differentiation, cytokine
XX and antibody production in B-cells, as well as cell differentiation and
XX cytokine production in plasmacytoid dendritic cells. The present
XX invention describes immunomodulator compositions that also comprise an
XX antigen selected from, for example, viruses, bacteria, parasites, tumour
XX cells and glycolipids. As such, these DNA oligos can be used in gene
XX therapy for inducing B-cell activation, treating, preventing or
XX ameliorating an immune system disorder or a tumoural disease including
XX chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
XX carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
XX variant DNA oligo, used in an exemplification of the invention.
XX
XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19.2; DB 1; Length 24;
XX Best Local Similarity 87.5%; Pred. No. 8.4e+02;
XX Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
DB 24 AAAAAAAAAACAAATGAAAAAAAA 1

RESULT 755
AD081076
ID AD081076 standard; DNA; 24 BP.
XX
XX AD081076;
XX
XX 29-JUL-2004 (first entry)
XX
XX Cow prion protein microsatellite locus primer #88.
XX
XX gene typing; polymorphic microsatellite loci; PML;
XX disease predisposition; microsatellite marker; prion disease;
KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
KW milk protein; hormone; transcription factor; pT7-blue-vector; cow;
KW microsatellite; PCR; primer; ss.
XX
XX Bos taurus.
XX
XX DE10236711-A1.
XX

```

KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
 KW renal cell carcinoma.

XX Synthetic.

XX WO2003101375-A2.

XX 11-DEC-2003.

XX 30-MAY-2003; 2003WO-EP005691.

XX 30-MAY-2002; 2002CA-02388049.

XX (IMMU-) IMMUNOTECH SA.

XX Lopez RA;

XX WPI; 2004-053333/05.

XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 acid sequence motif, useful for inducing B-cell activation, treating, e.g.
 preventing or ameliorating immune system disorder or tumoral disease e.g.
 melanoma.

XX Claim 14; SEQ ID NO 23; 139pp; English.

XX This invention relates to novel immunostimulatory oligonucleotides that
 contain a non-palindromic sequence motif. Specifically, it refers to DNA
 oligonucleotides (without a CpG motif), which can stimulate an immune
 response in animals of the order of primates, including humans. The immune
 response is characterised by the proliferation, differentiation, cytokine
 and antibody production in B-cells, as well as cell differentiation and
 cytokine production in plasmacytoid dendritic cells. The present
 invention describes immunomodulator compositions that also comprise an
 antigen selected from, for example, viruses, bacteria, parasites, tumour
 cells and glycolipids. As such, these DNA oligos can be used in gene
 therapy for inducing B-cell activation, treating, preventing or
 ameliorating an immune system disorder or a tumoural disease including
 chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 carcinoma. This oligonucleotide sequence is an immunostimulatory non-CpG
 variant DNA oligo, used in an exemplification of the invention.

XX Sequence 24 BP; 1 A; 1 C; 1 G; 21 T; 0 U; 0 Other;

Query Match 0.7%; Score 19.2; DB 1; Length 24;
 Best Local Similarity 87.5%; Pred. No. 8.4e+02;
 Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732

DB 24 AAAAAAAAAACAAATGAAAAAAAA 1

RESULT 755

AD081076

ID AD081076 standard; DNA; 24 BP.

XX AD081076;

XX 29-JUL-2004 (first entry)

XX Cow prion protein microsatellite locus primer #88.

XX gene typing; polymorphic microsatellite loci; PML;
 XX disease predisposition; microsatellite marker; prion disease;
 KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
 KW milk protein; hormone; transcription factor; pT7-blue-vector; cow;
 KW microsatellite; PCR; primer; ss.

XX Bos taurus.

XX DE10236711-A1.

XX


```

PD 26-FEB-2004.
XX
PF 09-AUG-2002; 2002DE-01036711.
XX
PR 09-AUG-2002; 2002DE-01036711.
XX
XX (UYHO-) UNIV HOHENHEIM.
XX
PI Geldermann H, Preuss S, Han Y;
XX
DR WPI; 2004-215730/21.
XX
XX Typing genes that contain polymorphic microsatellite loci, useful for
PT identifying predisposition to disease, by amplification and determining
PT length of amplicons.
XX
PS Example 3; Page 29; 64pp; German.
XX
XX The invention describes a method of typing (M1) a gene (I) that has one
CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
CC amplification of at least one DNA region of (I) that includes PML, using
CC as template a DNA sample containing at least one segment of (I); and
CC determining the length of the resulting amplicon(s). Also described are:
CC a method of determining (M2) microsatellite markers (MM) for
CC predisposition to a disease, associated with a gene that includes one or
CC more PML; and prediagnosis (M3) of diseases associated with gene that
CC include PML. The method is used to identify microsatellite markers, in a
CC disease-related gene, that are associated with a predisposition to
CC diseases and for prediagnosis of such diseases, especially prion diseases
CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
CC metabolic diseases; also to type genes that encode milk proteins,
CC hormones or transcription factors. The method is simpler, quicker and
CC particularly less expensive than known methods based on sequencing. This
CC sequence represents a primer used to genotype a region of the cow prion
CC protein (PrP) comprising a polymorphic microsatellite locus.
XX
SQ Sequence 24 BP; 21 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 19.2; DB 1; Length 24;
Best Local Similarity 87.5%; Pred. No. 8.4e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 1 AAAAAAAAAACAAACAAACAAACA 24

RESULT 756
AD081066/C
ID AD081066 standard; DNA; 24 BP.
XX
AC AD081066;
XX
XX 29-JUL-2004 (first entry)
XX
DE Cow prion protein microsatellite locus primer #78.
XX
XX gene typing; polymorphic microsatellite loci; PML;
XX disease predisposition; microsatellite marker; prion disease;
XX cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
XX milk protein; hormone; transcription factor; pT7-blue-vector; cow;
XX microsatellite; PCR; primer; ss.
XX
OS Bos taurus.
XX
XX DE10236711-A1.
XX
XX 26-FEB-2004.
XX
XX 09-AUG-2002; 2002DE-01036711.
XX
XX 09-AUG-2002; 2002DE-01036711.
XX
XX

```

```

PA (UYHO-) UNIV HOHENHEIM.
XX
PI Geldermann H, Preuss S, Han Y;
XX
DR WPI; 2004-215730/21.
XX
XX Typing genes that contain polymorphic microsatellite loci, useful for
PT identifying predisposition to disease, by amplification and determining
PT length of amplicons.
XX
PS Example 3; Page 28; 64pp; German.
XX
XX The invention describes a method of typing (M1) a gene (I) that has one
CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
CC amplification of at least one DNA region of (I) that includes PML, using
CC as template a DNA sample containing at least one segment of (I); and
CC determining the length of the resulting amplicon(s). Also described are:
CC a method of determining (M2) microsatellite markers (MM) for
CC predisposition to a disease, associated with a gene that includes one or
CC more PML; and prediagnosis (M3) of diseases associated with gene that
CC include PML. The method is used to identify microsatellite markers, in a
CC disease-related gene, that are associated with a predisposition to
CC diseases and for prediagnosis of such diseases, especially prion diseases
CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
CC metabolic diseases; also to type genes that encode milk proteins,
CC hormones or transcription factors. The method is simpler, quicker and
CC particularly less expensive than known methods based on sequencing. This
CC sequence represents a primer used to genotype a region of the cow prion
CC protein (PrP) comprising a polymorphic microsatellite locus.
XX
SQ Sequence 24 BP; 0 A; 3 C; 0 G; 21 T; 0 U; 0 Other;
Query Match 0.7%; Score 19.2; DB 1; Length 24;
Best Local Similarity 87.5%; Pred. No. 8.4e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 24 AAAAAAAAAAGAAAGAAAGAAAAA 1

RESULT 757
ADU89376/C
ID ADU89376 standard; DNA; 24 BP.
XX
AC ADU89376;
XX
XX 10-FEB-2005 (first entry)
XX
DE Allergic response suppressor oligonucleotide #60.
XX
XX ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
XX antibacterial; virucide; immunoglobulin E antagonist; allergy;
XX immunostimulator; asthma; rhinitis; urticaria; dermatitis;
XX bacterial infection; viral infection.
XX
OS Synthetic.
XX
XX US2004235774-A1.
XX
XX 25-NOV-2004.
XX
XX 23-APR-2004; 2004US-00831778.
XX
XX 03-FEB-2000; 2000US-0179991P.
XX
XX 02-FEB-2001; 2001US-00776479.
XX
XX (BRAT/) BRATZLER R L.
XX PA (PETE/) PETERSEN D M.
XX PA (FOUR/) FOURON Y.
XX
PI Bratzler RL, Petersen DM, Fouron Y;
XX

```

DR WPI; 2004-833006/82.
XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic
PT dermatitis, in a subject, comprises administering a first and second dose
PT of an immunostimulatory nucleic acid.
XX
XX Disclosure; SEQ ID NO 60; 235pp; English.
XX
CC The invention relates to a method of suppressing a symptom of an allergic
CC response in a subject by administering a first and second dose of an
CC immunostimulatory nucleic acid that comprises a nucleotide sequence
CC comprising 5'-cg-3', and where the second dose is administered from 1 day
CC to 8 weeks after the first dose. The methods and compositions of the
CC present invention are useful for the treatment or prevention of asthma
CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
CC an immunostimulatory nucleic acid alone or in combination with other
CC medications. They can also be used in preventing bacterial and viral
CC infections. This sequence represents an oligonucleotide used in the
CC method of the invention.
XX
XX Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19.2; DB 1; Length 24;
Best Local Similarity 87.5%; Pred. No. 8.4e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 24 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 750
AED74921/c
ID AED74921 standard; DNA; 24 BP.
XX
AC AED74921;
XX
DT 12-JAN-2006 (first entry)
XX
DE Immunostimulatory oligonucleotide, SEQ ID 54.
XX
KW Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;
KW Anticancer; Dermatological; Antiallergic; helper T-lymphocyte;
KW Immune stimulation; inflammation; psoriasis; inflammatory bowel disease;
KW Crohn's disease; ulcerative colitis; eczema; skin allergy;
KW contact dermatitis; ss; phosphorothioate.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..24
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
XX
PN US2005250726-A1.
XX
XX 10-NOV-2005.
XX
XX 12-MAY-2005; 2005US-00127654.
XX
XX 29-MAR-2001; 2001US-0279642P.
XX
XX 29-MAR-2002; 2002US-00112653.
XX
XX (IOWA) UNIV IOWA RES FOUND.
XX
XX Krieg AM, Berg DJ;
XX
XX WPI; 2005-768014/78.
XX
XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
PT to augment T-helper1 cells like immune activation and to treat non-
PT allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.

XX Disclosure; SEQ ID NO 54; 58pp; English.
XX
XX The present invention relates to a method for augmenting T-helper 1 cells
XX (Th1)-like immune activation in a subject. The method comprises
XX administering an immunostimulatory nucleic acid (I) to induce Th1-like
XX immune activation; and administering a cyclooxygenase inhibitor (II) to
XX inhibit prostaglandin expression, is new. The present sequence is one
XX such immunostimulatory nucleic acid. (I) is useful for treating non-
XX allergic inflammatory diseases such as psoriasis, inflammatory bowel
XX disease (Crohn's disease and ulcerative colitis), eczema, allergic
XX contact dermatitis or latex dermatitis.
XX
XX Sequence 24 BP; 0 A; 0 C; 3 G; 21 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19.2; DB 1; Length 24;
Best Local Similarity 87.5%; Pred. No. 8.4e+02;
Matches 21; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2732
Db 24 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 759
AAQ75551/c
ID AAQ75551 standard; DNA; 19 BP.
XX
AC AAQ75551;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; CDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75796)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 1 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2707 CTAATAAAAAAAAAAAAAA 2725
XXXXXXXXXXXXXXXXXXXX

```

Db      19 CTAAAAAAAAAAAAAAAAAAAA 1

RESULT 760
AAT10757/c
ID      AAT10757 standard; RNA; 19 BP.
XX
XX
AC      AAT10757;
XX
DT      09-SEP-1996 (first entry)
XX
DE      Oligonucleotide probe, T-2.
XX
KW      Electronically self-addressable device; ED; electrode; current source;
KW      attachment layer; permeable; counterion; genetic typing; probe;
KW      detection; ss.
XX
OS      Synthetic.
XX
FH      Key      Location/Qualifiers
FT      modified_base 1
FT      /*tag= a
FT      /note= "5'-amino terminus"
XX
PN      WO9601836-A1.
XX
XX
XX      25-JAN-1996.
XX
XX      05-JUL-1995; 95WO-US008570.
XX
PR      07-JUL-1994; 94US-00271882.
XX
PA      (NANO-) NANOGEN INC.
XX
PI      Heller MJ, Tu E, Evans GA, Sosnowski RG;
XX      WPI; 1996-097582/10.
XX
XX      Electronically self-addressable device - used for electronic control of,
XX      e.g. nucleic acid hybridisation.
XX
PS      Example 1; Page 61; 155pp; English.
XX
CC      The sequences given in AAT10742-67 are synthetic oligonucleotides which
CC      are used in the construction of the electronically self-addressable
CC      device (ED) of the invention. The ED comprises a substrate, an electrode
CC      or opt. a number of electrodes supported by the substrate, a current
CC      source operatively connected to the electrode and an attachment layer
CC      adjacent to the electrode which is permeable to a counterion but not
CC      permeable to a molecule capable of insulating or binding to the
CC      electrode. The attachment layer is capable of attaching a macromolecule.
CC      The ED is used for genetic typing and comprises a number of
CC      electronically addressable locations each comprising an electrode, and a
CC      binding entity, such as one of these probes, attached to each of the
CC      locations capable of detecting the presence of a genetic sequence
XX
XX      Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
Query Match      0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAAAAAAAAAAAAAAAAAA 2727
      |||||
Db      19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 761
AAV07878/c
ID      AAV07878 standard; DNA; 19 BP.
XX
XX      AAV07878;
XX
XX
XX      13-OCT-1998 (first entry)
XX
DE      Oligonucleotide containing modified internucleotide linkage.
XX
KW      oligonucleotide; ss.
XX
OS      Synthetic.
XX
XX      Key      Location/Qualifiers

```

```

DT      14-DEC-1998 (first entry)
XX
DE      Aminoxy-modified oligonucleotide.
XX
KW      phosphorothioate; ras gene; malignant cell growth; aminoxy-modified;
KW      nuclease resistance; reporter group; ss.
XX
OS      Synthetic.
XX
FH      Key      Location/Qualifiers
FT      modified_base 15..18
FT      /*tag= a
FT      /note= "5-methyl, 2'-aminoxyethoxy-thymidine"
XX
PN      WO9835978-A1.
XX
XX      20-AUG-1998.
XX
XX      13-FEB-1998; 98WO-US002405.
XX
PR      14-FEB-1997; 97US-0037143P.
PR      30-JAN-1998; 98US-00016520.
XX
XX      (ISIS-) ISIS PHARM INC.
XX
XX      Cook PD, Manoharan M, Kawasaki AM;
XX      WPI; 1998-568232/48.
XX
XX      New aminoxy-modified oligonucleotides - which can show improved binding
XX      to complementary strands and improved resistance to nuclease.
XX
PS      Disclosure; Page 84; 131pp; English.
XX
CC      The invention relates to aminoxy-modified(oligo)nucleotides or
CC      nucleosides which are useful as therapeutics, diagnostics, and research
CC      reagents. They may be used, e.g., for modulation of the ras gene and may
CC      be able to modulate the process of transformation from normal to
CC      malignant cell growth. They may be prepared using known methods.
CC      Inclusion of the aminoxy moieties can improve binding of
CC      oligonucleotides to complementary strands. The moieties can also provide
CC      conjugation sites useful for conjugation of useful ligands (e.g. reporter
CC      groups and groups for modifying uptake, distribution or other
CC      pharmacodynamic properties) to oligonucleotides. The present sequence
CC      represents an example of an aminoxy-modified oligonucleotide disclosed
CC      in the specification
XX
XX      Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
Query Match      0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAAAAAAAAAAAAAAAAAA 2727
      |||||
Db      19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 762
AAV06820/c
ID      AAV06820 standard; DNA; 19 BP.
XX
XX      AAV06820;
XX
XX
XX      13-OCT-1998 (first entry)
XX
DE      Oligonucleotide containing modified internucleotide linkage.
XX
KW      oligonucleotide; ss.
XX
OS      Synthetic.
XX
XX      Key      Location/Qualifiers

```

```

FT modified_base 16..18
FT /tag= a
FT /note= "these T residues are formed as part of a
FT conventional phosphoramidite oligonucleotide synthesis
FT process but using as the reactant a thymosine nucleoside
FT having at the 3'-position a group of formula -CH2-
FT P(OCH2CH2CN)-N(iPr)2"
XX
XX WO9747636-A2.
XX
XX 18-DEC-1997.
XX
XX 03-JUN-1997; 97WO-GB001490.
XX
XX 13-JUN-1996; 96GB-00012600.
XX (NOVS ) NOVARTIS AG.
XX
XX Collingwood SP, Moser HE, Altmann K, Douglas ME;
XX
XX WPI; 1998-052233/05.
XX
XX New tetra:hydro:furan derivatives - useful in the synthesis of
XX oligo:nucleotide(s).
XX
XX Example 12; Page 29; 37pp; English.
XX
XX The invention relates, inter alia, to a method of preparing an
XX oligonucleotide by coupling (1) a new nucleoside having a protected 5'-
XX hydroxy group and at the 3'-position a group of formula -CH2-P(OR3)-
XX NR4R5, with (2) a nucleoside or oligonucleotide having a free 5'-hydroxy
XX group, to give (3) a precursor having an internucleoside linkage of
XX formula -CH2-P(OR3)-O-; and converting this to a linkage of formula -CH2-
XX P(OR3)(-X)-O- (where X = S or O). The present sequence is a specific
XX example of an oligonucleotide so prepared
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 763
AAX81316/c
ID AAX81316 standard; DNA; 19 BP.
XX
XX AAX81316;
XX
XX 20-AUG-1999 (first entry)
XX
XX 5' amino oligonucleotide probe T-2.
XX
XX Microelectronic device; multi-step reaction; microscopic format;
XX ion-permeable permeation layer; electrode; electrical control; transport;
XX attachment; binding; DNA/RNA hybrid; probe; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX misc_feature 1 /tag= a
XX /note= "amino group attached at 5' terminal"
XX
XX WO929711-A1.
XX
XX 17-JUN-1999.
XX
XX 01-DEC-1998; 98WO-US025475.

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XX 05-DEC-1997; 97US-00986065.
XX (NANO-) NANOGEN INC.
XX Sosnowski RG, Butler WF, Tu E, Nerenberg MI, Heller MJ, Edman CF;
XX WPI; 1999-385567/32.
XX
XX New microelectronic device designed to carry out and control multi-step
XX and multiplex molecular biological reactions in microscopic format.
XX
XX Example 1; Page 90; 179pp; English.
XX
XX The specification describes a self-addressable, self-assembling
XX microelectronic device which is designed to actively carry out and
XX control multi-step and multiplex molecular biological reactions in
XX microscopic formats. A key aspect of this invention is played by the ion
XX permeable permeation layer which overlies the electrode. This permeation
XX layer allows attachment of nucleic acids to permit immobilization but
XX also separates the attached oligonucleotides and hybridized target DNA
XX sequences from the highly reactive electrochemical environment generated
XX immediately at the electrode surface. The microelectronic device is
XX designed and fabricated to actively carry out and control reactions such
XX as nucleic acid hybridizations, antibody/antigen reactions, sample
XX preparation, diagnostics and biopolymer synthesis. The device can
XX electronically control the transport and attachment of specific binding
XX entities, such as nucleic acids and polypeptides, to specific micro-
XX locations. The device can subsequently control the transport and reaction
XX of analytes or reactants at the addressed specific micro-locations. The
XX device is able to concentrate analytes and reactants, remove non-
XX specifically bound molecules, provide stringency control for DNA
XX hybridization reactions and improve the detection of analytes. The
XX present sequence represents a probe used to exemplify the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 764
AAX81927/c
ID AAX81927 standard; DNA; 19 BP.
XX
XX AAX81927;
XX
XX 07-SEP-1999 (first entry)
XX
XX Polynucleotide strand with amino groups.
XX
XX Enzyme-specific cleavable polynucleotide substrate;
XX quenched fluorescent moiety; biological assay; detection; identification;
XX microorganism; sterilization assurance; nuclease; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 7 /tag= a
XX /note= "amine-modified C6 derivative of deoxythymidine
XX (dT)"
XX
XX modified_base 9 /tag= b
XX /note= "amine-modified C6 derivative of deoxythymidine
XX (dT)"
XX
XX modified_base 11 /tag= c
XX

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```

FT      /note= "amine-modified C6 derivative of deoxythymidine
FT      (dT)"
FT      13
FT      modified_base
FT      /tag= d
FT      /note= "amine-modified C6 derivative of deoxythymidine
FT      (dT)"
XX
XX      WO9935288-A1.
XX
XX      15-JUL-1999.
XX
XX      20-AUG-1998; 98WO-US017311.
XX
XX      09-JAN-1998; 98US-00005260.
XX
XX      (MINN ) MINNESOTA MINING & MFG CO.
XX
XX      Wei A, Mach PA;
XX
XX      WPI; 1999-419356/35.
XX
XX      An enzyme-specific cleavable polynucleotide substrate bearing quenched
XX      fluorescent moieties.
XX
XX      Example 2; Page 20; 34pp; English.
XX
XX      The specification describes an enzyme-specific cleavable polynucleotide
XX      substrate bearing quenched fluorescent moieties. The enzyme-specific
XX      cleavable polynucleotide substrate is useful in biological assays for
XX      detection and identification of microorganisms, sterilization assurance,
XX      pharmaceutical discovery, enzyme assays, immunoassays and other
XX      biological assays. The method provides a rapid and convenient approach
XX      for detection and identification of microorganisms. It can be adapted to
XX      sequence-dependent or sequence-independent tests. The invention provides
XX      improved accuracy, faster detection, and overall lower cost in detection
XX      and identification of microorganisms. The presence of nuclease is
XX      measured more accurately and sensitively by red-shifting the emission
XX      wavelength from far UV region (350-400 nm) to the 500-600 nm region of
XX      the electromagnetic spectrum and reducing the effect of background signal
XX      levels of intact reagents. The present sequence is used in the course of
XX      the invention
XX
XX      Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX      Query Match      0.7%; Score 19; DB 1; Length 19;
XX      Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX      Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy      2709 AAAAAAAAAAAAAAAAAA 2727
Db      19 AAAAAAAAAAAAAAAAAA 1

RESULT 765
AAZ01358/c
ID      AAZ01358 standard; DNA; 19 BP.
XX
XX      AAZ01358;
XX
XX      27-SEP-1999 (first entry)
XX
XX      PCR primer for PGI biallelic marker 4-4-187.
XX
XX      PGI gene; biallelic marker; PCR primer; PGI-related biallelic marker;
XX      cancer; prostate cancer; diagnosis; therapy; prostate specific antigen;
XX      PSA; human; ss.
XX
XX      Synthetic.
XX      Homo sapiens.
XX
XX      WO9932644-A2.
XX
XX      01-JUL-1999.
XX
XX      PN

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XX      22-DEC-1998; 98WO-IB002133.
XX
XX      22-DEC-1997; 97US-00996306.
XX
XX      09-SEP-1998; 98US-0099658P.
XX
XX      (GBST ) GENSET.
XX
XX      Cohen D, Blumenfeld M, Chumakov I, Bougueleret L;
XX
XX      WPI; 1999-405178/34.
XX
XX      Use of a prostate cancer associated gene and biallelic markers derived
XX      from it.
XX
XX      Claim 4; Page 374; 385pp; English.
XX
XX      The invention relates to a mammalian PGI gene and protein, and a set of
XX      PGI biallelic markers. The PGI polynucleotide and biallelic markers are
XX      used in a hybridisation assay, a sequencing assay, or in an allele-
XX      specific amplification assay for determining the identity of a nucleotide
XX      at a PGI-related biallelic marker. The methods can be used to detect and
XX      to assess the risk of developing cancer or prostate cancer. Early-stage
XX      diagnosis of prostate cancer relies on prostate specific antigen (PSA)
XX      dosage. However, the effectiveness of this is limited due to its
XX      inability to discriminate between malignant and non-malignant affections
XX      of the organ. A need exists for both a reliable diagnostic procedure
XX      which would enable early-stage diagnosis, and for preventative and
XX      curative treatments of the disease. The PGI gene can be used for
XX      detection of prostate cancer, and the risk of developing it in the
XX      future, and can also be used to determine therapies for the disease
XX
XX      Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX      Query Match      0.7%; Score 19; DB 1; Length 19;
XX      Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX      Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy      2709 AAAAAAAAAAAAAAAAAA 2727
Db      19 AAAAAAAAAAAAAAAAAA 1

RESULT 766
AAZ61390/c
ID      AAZ61390 standard; DNA; 19 BP.
XX
XX      AAZ61390;
XX
XX      19-JUN-2000 (first entry)
XX
XX      Uniform phosphodiester oligonucleotide.
XX
XX      Oligomeric compound; 2'-O-modified ribosyl nucleoside; 3' endo geometry;
XX      nuclease resistance; phosphodiester; ss.
XX
XX      Synthetic.
XX
XX      Key      Location/Qualifiers
XX      modified_base 16      /tag= a
XX      modified_base 17      /note= "2'-modified T"
XX      modified_base 18      /tag= b
XX      modified_base 19      /note= "2'-modified T"
XX      modified_base 19      /tag= c
XX      modified_base 19      /note= "2'-modified T"
XX      modified_base 19      /tag= d
XX      modified_base 19      /note= "2'-modified T"
XX
XX      WO200008044-A1.
XX
XX      PN

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XX PD 17-FEB-2000.
XX PF 06-AUG-1999; 99WO-US017895.
XX PR 07-AUG-1998; 98US-00130566.
XX PS (ISIS-) ISIS PHARM INC.
XX PI Manoharan M, Cook PD;
XX PT WPI; 2000-205668/18.
XX DR Novel 2'-O-aminoethyloxyethyl modified nucleosides and oligonucleotides
XX PT used in diagnostic, therapeutic and research reagents.
XX PS Disclosure; Page 44; 60pp; English.
XX CC The present sequence represents an uniform phosphodiester
CC oligonucleotide. The specification describes oligomeric compounds
CC containing 2'-O-modified ribosyl nucleosides. The 2'-O-modified
CC nucleosides include ring structures that position the sugar moiety of the
CC nucleosides preferentially in 3' endo geometries. The modified oligomeric
CC compounds have increased binding affinity and increased nuclease
CC resistance. The oligomeric compounds can be used in diagnostic,
CC therapeutic and research reagents
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
DB 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 767
AAZ61404/c
ID AAZ61404 standard; DNA; 19 BP.
AC AAZ61404;
XX 19-JUN-2000 (first entry)
XX 2'-O-modified ribosyl oligonucleotide with phosphodiester linkages.
XX Oligomeric compound; 2'-O-modified ribosyl nucleoside; 3' endo geometry;
XX nuclease resistance; phosphorothioate; ss.
XX Synthetic.
XX Key Location/Qualifiers
FT misc_feature 1..19
FT /tag= a
FT /note= "nucleosides linked by phosphodiester linkages"
FT modified_base 16..19
FT /tag= b
FT /note= "2'-O-[2-N,N-dimethylaminoethyl]oxyethyl-5- methyl
FT uridine"
XX WO200008044-A1.
XX 17-FEB-2000.
XX PF 06-AUG-1999; 99WO-US017895.
XX PR 07-AUG-1998; 98US-00130566.
XX PS (ISIS-) ISIS PHARM INC.
XX PI Manoharan M, Cook PD;

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XX WPI; 2000-205668/18.
XX Novel 2'-O-aminoethyloxyethyl modified nucleosides and oligonucleotides
XX used in diagnostic, therapeutic and research reagents.
XX PS Disclosure; Page 51; 60pp; English.
XX CC The present sequence represents an oligomeric compound containing 2'-O-
XX modified ribosyl nucleosides. The oligomeric compound contains
XX phosphodiester linkages. The 2'-O-modified nucleosides include ring
XX structures that position the sugar moiety of the nucleosides
XX preferentially in 3' endo geometries. The modified oligomeric compounds
XX have increased binding affinity and increased nuclease resistance. The
XX oligomeric compounds can be used in diagnostic, therapeutic and research
XX reagents
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
DB 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 768
AAC62422/c
ID AAC62422 standard; DNA; 19 BP.
XX AAC62422;
XX 07-FEB-2001 (first entry)
XX T19 diester for use in nuclease stability assay.
XX T19 diester; nuclease stability assay; polymerase chain reaction; PCR;
XX molecular cloning; disease diagnosis; disease treatment; ss.
XX Synthetic.
XX US6127124-A.
XX 03-OCT-2000.
XX 20-JAN-1999; 99US-00234237.
XX 20-JAN-1999; 99US-00234237.
XX (ISIS-) ISIS PHARM INC.
XX Leeds JM, Cummins LL;
XX WPI; 2000-637737/61.
XX Determining the nuclease stability and relative binding affinity of an
XX oligomeric compound comprises capillary gel electrophoresis using laser-
XX induced fluorescence.
XX Example 3; Col 19-20; 14pp; English.
XX The present invention is concerned with methods of determining the
XX nuclease stability of oligomeric compounds using capillary-gel
XX electrophoresis and laser-induced fluorescence. The methods are useful in
XX the polymerase chain reaction (PCR), molecular cloning and disease
XX diagnosis and treatment. The present sequence was used in a demonstration
XX of the methods of the invention
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;

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Best Local Similarity 100.0%; Pred. No. 7.7e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 19; Conservative 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 769
AAZ95241/c
ID AAZ95241 standard; DNA; 19 BP.
XX
AC AAZ95241;
XX
DT 05-JUN-2000 (first entry)
XX
DE Modified oligonucleotide #3 ISIS # 22111.
XX
KW Antisense oligonucleotide; phosphorothioate; gene therapy; ISIS # 22111;
KW research reagent; therapeutic; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..15
FT /*tag= a
FT /note= "Phosphorothioate internucleotide linkage"
FT misc_feature 15..19
FT /*tag= d
FT /note= "Optionally all phosphorothioate internucleotide
FT linkages"
FT modified_base 16..19
FT /*tag= c
FT /mod_base= OTHER
FT /note= "Optionally all 3'-O-(2-methoxyhexyl) or all 2'-O-
FT misc_RNA 19
FT /*tag= d
XX
XX WO200004189-A1.
XX
XX 27-JAN-2000.
XX
XX 13-JUL-1999; 99WO-US015886.
XX
XX 14-JUL-1998; 98US-00115043.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD;
XX
XX WPI; 2000-182445/16.
XX
XX Novel modified oligonucleotides, useful in antisense methodologies,
XX diagnostics, therapeutics and as research reagents.
XX
XX Example 54; Page 59; 75pp; English.
XX
XX This sequence represents a modified oligonucleotide used in the course of
XX the invention. The invention relates to oligonucleotides comprising
XX nucleotides covalently linked together by internucleotide linkages where
XX at least 1 nucleotide is linked to adjacent nucleotide by a 2',5'-
XX internucleotide linkage and bears a 3'-substituent. The oligonucleotides
XX can be used in gene therapy and are also useful in antisense
XX methodologies, diagnostics, therapeutics and as research reagents
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 1 U; 0 Other;
XX
XX Query Match 0.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 771
AAZ06839/c

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Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 770
AAZ95240/c
ID AAZ95240 standard; DNA; 19 BP.
XX
AC AAZ95240;
XX
DT 05-JUN-2000 (first entry)
XX
DE Modified oligonucleotide #3 ISIS # 22110.
XX
KW Antisense oligonucleotide; phosphorothioate; gene therapy; ISIS # 22110;
KW research reagent; therapeutic; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..15
FT /*tag= a
FT /note= "Phosphorothioate internucleotide linkage"
FT misc_feature 15..19
FT /*tag= d
FT /note= "Optionally all phosphorothioate internucleotide
FT linkages"
FT modified_base 16..19
FT /*tag= c
FT /mod_base= OTHER
FT /note= "Optionally all 3'-O-(2-methoxyhexyl) or all 2'-O-
FT WO200004189-A1.
XX
XX 27-JAN-2000.
XX
XX 13-JUL-1999; 99WO-US015886.
XX
XX 14-JUL-1998; 98US-00115043.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD;
XX
XX WPI; 2000-182445/16.
XX
XX Novel modified oligonucleotides, useful in antisense methodologies,
XX diagnostics, therapeutics and as research reagents.
XX
XX Example 54; Page 59; 75pp; English.
XX
XX This sequence represents a modified oligonucleotide used in the course of
XX the invention. The invention relates to oligonucleotides comprising
XX nucleotides covalently linked together by internucleotide linkages where
XX at least 1 nucleotide is linked to adjacent nucleotide by a 2',5'-
XX internucleotide linkage and bears a 3'-substituent. The oligonucleotides
XX can be used in gene therapy and are also useful in antisense
XX methodologies, diagnostics, therapeutics and as research reagents
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 771
AAZ06839/c

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ID AAA06839 standard; DNA; 19 BP.
XX
AC AAA06839;
XX
DT 19-JUN-2000 (first entry)
XX
DE Modified T-containing oligonucleotide, SEQ ID NO:14.
XX
KW Modified nucleoside; aminoxy group;
XX 2'-deoxy-erythro-pentofuranosyl sugar moiety; nuclease resistant;
KW hybridisation; binding affinity; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 16..19
FT /*tag= a
FT /note= "These nucleotides are substituted with 2'-O-{2-
FT [N-(2-amino)ethyl-N-(methyl)]aminoxyethyl} group"
XX
PN WO200008042-A1.
XX
XX 17-FEB-2000.
XX
XX 09-AUG-1999; 99WO-US017988.
XX
XX 07-AUG-1998; 98US-00130973.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD, Prakash TP, Kawasaki AM;
XX
XX WPI; 2000-224020/19.
XX
XX Aminoxy-modified nucleosides and oligonucleotides useful in diagnostic,
XX therapeutic and research reagents and for modulating the expression of
XX protein in organisms.
XX
XX Example 99; Page 120; 195pp; English.
XX
XX The invention relates to aminoxy-modified nucleosides and
XX oligonucleotides and to oligonucleotides that elicit RNase H for cleavage
XX in a complementary nucleic acid strand. It also relates to
XX oligonucleotides wherein at least some of the nucleotides are
XX functionalised to be nuclease resistant, at least some of the nucleotides
XX include a substituent that potentiates hybridisation of the
XX oligonucleotide to a complementary strand, and at least some of the
XX nucleotides include a 2'-deoxy-erythro-pentofuranosyl sugar moiety. The
XX inclusion of one or more aminoxy moieties in such oligonucleotides
XX provides for improved binding of such oligonucleotides to a complementary
XX strand. The oligonucleotides of the invention are used as diagnostic,
XX therapeutic or research reagents, and can be used to modulate gene
XX expression in organisms. The oligonucleotides containing the modified
XX nucleosides have increased nuclease resistance and increased binding
XX affinity to a complementary strand. The present sequence represents an
XX oligonucleotide containing nucleotides substituted with a 2'-O-{2-
XX amino)ethyl-N-(methyl)]aminoxyethyl} group
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 772
AAA88952/c
ID AAA88952 standard; DNA; 19 BP.
XX

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AC AAA88952;
XX
DT 05-MAR-2001 (first entry)
XX
DE Oligonucleotide ISIS 22115.
XX
KW Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
KW dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
KW diagnosis; DNA-RNA hybrid; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..15
FT /*tag= f
FT /note= "phosphorothioate linkage"
FT modified_base 16
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-(2-methoxyethyl)thymidine"
FT modified_base 17
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-O-(2-methoxyethyl)thymidine"
FT modified_base 18
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-(2-methoxyethyl)thymidine"
FT misc_RNA 19
FT /*tag= e
FT /label= RNA
FT modified_base 19
FT /*tag= d
FT /mod_base= OTHER
FT /note= "2'-O-(2-methoxyethyl)uridine"
XX
XX WO200066609-A1.
XX
XX 09-NOV-2000.
XX
XX 03-MAY-2000; 2000WO-US011913.
XX
XX 03-MAY-1999; 99US-00303586.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Mohan V;
XX
XX WPI; 2000-672833/65.
XX
XX New oligonucleotides containing sequences with A and B geometry, used to
XX treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
XX bacterial infections, bind to single stranded RNA or DNA.
XX
XX Example 54; Page 69; 132pp; English.
XX
XX Oligonucleotide ISIS 22115 contains a mixed phosphodiester and
XX phosphorothioate backbone and has 2'-O-(2-methoxyethyl) chemistry. It was
XX used in experiments to determine the effects of snake venom
XX phosphodiesterase and liver homogenate on the stability of
XX oligonucleotides. Novel oligonucleotides of the invention have both A-
XX and B-form conformational geometry. The A-form geometry modulates the
XX binding affinity and nuclease resistance of the oligonucleotide. The B-
XX form geometry allows the oligonucleotide to serve as substrate for RNase-
XX H when bound to a target nucleic acid strand. The oligonucleotides can be
XX used to treat psoriasis and other inflammatory skin conditions, skin
XX cancers and viral, bacterial and fungal infections, and in various
XX diagnostic applications
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;

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Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAA 1

RESULT 773
ID AAA88965/c
AC AAA88965;
XX
DT 05-MAR-2001 (first entry)
XX
DE 2'-Modified chimeric oligonucleotide.
XX
KW Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
KW dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
KW diagnosis; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 16
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-modified thymidine, i.e. -S-Me, -Me, 2'-ara-
FT (F), 2'-ara-(OH), -2'-ara-(OMe)"
FT modified_base 17
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-modified thymidine, i.e. -S-Me, -Me, 2'-ara-
FT (F), 2'-ara-(OH), -2'-ara-(OMe)"
FT modified_base 18
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-modified thymidine, i.e. -S-Me, -Me, 2'-ara-
FT (F), 2'-ara-(OH), -2'-ara-(OMe)"
FT modified_base 19
FT /*tag= d
FT /mod_base= OTHER
FT /note= "2'-modified thymidine, i.e. -S-Me, -Me, 2'-ara-
FT (F), 2'-ara-(OH), -2'-ara-(OMe)"
XX
PN WO200066609-A1.
XX
PD 09-NOV-2000.
XX
PF 03-MAY-2000; 2000WO-US011913.
XX
PR 03-MAY-1999; 99US-00303586.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Mohan V;
XX
DR WPI; 2000-672833/65.
XX
PT New oligonucleotides containing sequences with A and B geometry, used to
PT treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
PT bacterial infections, bind to single stranded RNA or DNA.
XX
PS Example 86; Page 102; 132pp; English.
XX
CC This sequence represents 2'-modified chimeric oligonucleotides containing
CC 2'-modified T. The nucleotides were used to examine the effects of the
CC modifications on nuclease resistance. Novel oligonucleotides of the
CC invention have both A- and B-form conformational geometry. The A-form
CC geometry modulates the binding affinity and nuclease resistance of the
CC oligonucleotide. The B-form geometry allows the oligonucleotide to serve
CC as substrate for RNase-H when bound to a target nucleic acid strand. The
CC oligonucleotides can be used to treat psoriasis and other inflammatory

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CC skin conditions, skin cancers and viral, bacterial and fungal infections,
CC and in various diagnostic applications
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAA 1

RESULT 774
ID AAA88949/c
XX AAA88949 standard; DNA; 19 BP.
XX
AC AAA88949;
XX
DT 05-MAR-2001 (first entry)
XX
DE Oligonucleotide ISIS 22112.
XX
KW Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
KW dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
KW diagnosis; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 16
FT /*tag= e
FT /note= "phosphorothioate linkage"
FT modified_base 17
FT /*tag= a
FT /mod_base= OTHER
FT /note= "3'-O-(2-methoxyethyl)thymidine"
FT modified_base 18
FT /*tag= b
FT /mod_base= OTHER
FT /note= "3'-O-(2-methoxyethyl)thymidine"
FT modified_base 19
FT /*tag= c
FT /mod_base= OTHER
FT /note= "3'-O-(2-methoxyethyl)thymidine"
FT modified_base 20
FT /*tag= d
FT /mod_base= OTHER
FT /note= "3'-O-(2-methoxyethyl)thymidine"
XX
PN WO200066609-A1.
XX
PD 09-NOV-2000.
XX
PF 03-MAY-2000; 2000WO-US011913.
XX
PR 03-MAY-1999; 99US-00303586.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Mohan V;
XX
DR WPI; 2000-672833/65.
XX
PT New oligonucleotides containing sequences with A and B geometry, used to
PT treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
PT bacterial infections, bind to single stranded RNA or DNA.
XX
PS Example 54; Page 69; 132pp; English.
XX
CC Oligonucleotide ISIS 22112 contains a phosphorothioate backbone and has
CC 3'-O-(2-methoxyethyl) chemistry. It was used in experiments to determine

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CC the effects of snake venom phosphodiesterase and liver homogenate on the
 CC stability of oligonucleotides. Novel oligonucleotides of the invention
 CC have both A- and B-form conformational geometry. The A-form geometry
 CC modulates the binding affinity and nuclease resistance of the
 CC oligonucleotide. The B-form geometry allows the oligonucleotide to serve
 CC as substrate for RNase-H when bound to a target nucleic acid strand. The
 CC oligonucleotides can be used to treat psoriasis and other inflammatory
 CC skin conditions, skin cancers and viral, bacterial and fungal infections,
 CC and in various diagnostic applications
 XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1
 AC AAA88950;
 XX 05-MAR-2001 (first entry)
 XX Oligonucleotide ISIS 22113.
 XX Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
 KW dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
 KW diagnosis; DNA-RNA hybrid; ss.
 XX Synthetic.
 XX Key Location/Qualifiers
 FH modified_base 1. .19
 FT /*tag= f
 FT /note= "phosphorothioate linkage"
 FT modified_base 16
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methoxyethyl)thymidine"
 FT modified_base 17
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methoxyethyl)thymidine"
 FT modified_base 18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methoxyethyl)thymidine"
 FT misc_RNA 19
 FT /*tag= e
 FT /label= RNA
 FT modified_base 19
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methoxyethyl)uridine"
 XX WO200066609-A1.
 PN 09-NOV-2000.
 XX 03-MAY-2000; 2000WO-US011913.
 XX 03-MAY-1999; 99US-00303586.
 XX (ISIS-) ISIS PHARM INC.
 XX Manoharan M, Mohan V;
 PI

DR WPI; 2000-672833/65.
 XX New oligonucleotides containing sequences with A and B geometry, used to
 PT treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
 PT bacterial infections, bind to single stranded RNA or DNA.
 XX Example 54; Page 69; 132pp; English.
 XX Oligonucleotide ISIS 22113 contains a phosphorothioate backbone and has
 CC 2'-O-(2-methoxyethyl) chemistry. It was used in experiments to determine
 CC the effects of snake venom phosphodiesterase and liver homogenate on the
 CC stability of oligonucleotides. Novel oligonucleotides of the invention
 CC have both A- and B-form conformational geometry. The A-form geometry
 CC modulates the binding affinity and nuclease resistance of the
 CC oligonucleotide. The B-form geometry allows the oligonucleotide to serve
 CC as substrate for RNase-H when bound to a target nucleic acid strand. The
 CC oligonucleotides can be used to treat psoriasis and other inflammatory
 CC skin conditions, skin cancers and viral, bacterial and fungal infections,
 CC and in various diagnostic applications
 XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1
 AC AAA88951;
 XX 05-MAR-2001 (first entry)
 XX Oligonucleotide ISIS 22114.
 XX Oligonucleotide; nuclease resistance; psoriasis; antipsoriatic;
 KW dermatological; cytostatic; virucide; antibacterial; fungicide; therapy;
 KW diagnosis; ss.
 XX Synthetic.
 XX Key Location/Qualifiers
 FH modified_base 1. .15
 FT /*tag= e
 FT /note= "phosphorothioate linkage"
 FT modified_base 16
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "3'-O-(2-methoxyethyl)thymidine"
 FT modified_base 17
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "3'-O-(2-methoxyethyl)thymidine"
 FT modified_base 18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "3'-O-(2-methoxyethyl)thymidine"
 FT modified_base 19
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "3'-O-(2-methoxyethyl)thymidine"
 XX WO200066609-A1.
 PN 09-NOV-2000.
 XX 03-MAY-2000; 2000WO-US011913.
 XX


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FT FT /*tag= e
FT FT /label= RNA
FT FT 19
FT FT /tag= d
FT FT /mod_base= OTHER
FT FT /note= "2'-O-(2-methoxyethyl)uridine"
XX
PN WO200066609-A1.
XX
PD 09-NOV-2000.
XX
XX
PP 03-MAY-2000; 2000WO-US011913.
XX
XX
PR 03-MAY-1999; 99US-00303586.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Mohan V;
XX
XX WPI; 2000-672833/65.
XX
XX New oligonucleotides containing sequences with A and B geometry, used to
PT treat and diagnose e.g. psoriasis, skin cancers and viral, fungal and
PT bacterial infections, bind to single stranded RNA or DNA.
XX
XX Example 54; Page 69; 132pp; English.
XX
XX Oligonucleotide ISIS 22111 contains a phosphodiester backbone and has 2'-
CC O-(2-methoxyethyl) chemistry. It was used in experiments to determine the
CC effects of snake venom phosphodiesterase and liver homogenate on the
CC stability of oligonucleotides. Novel oligonucleotides of the invention
CC have both A- and B-form conformational geometry. The A-form geometry
CC modulates the binding affinity and nuclease resistance of the
CC oligonucleotide. The B-form geometry allows the oligonucleotide to serve
CC as substrate for RNase-H when bound to a target nucleic acid strand. The
CC oligonucleotides can be used to treat psoriasis and other inflammatory
CC skin conditions, skin cancers and viral, bacterial and fungal infections,
CC and in various diagnostic applications
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02; Mismatches 0; Gaps 0;
Matches 19; Conservative 0; Indels 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 779
AAAY1630/C
ID AAA71630 standard; DNA; 19 BP.
XX
XX AAA71630;
XX
XX 14-DEC-2000 (first entry)
XX
XX Phosphorothioate 20-mer primer DNA #1.
XX
XX Phosphorothioate; primer; oligomer synthesis; antisense therapy; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate linkage"
XX
XX EP1028124-A2.
XX
XX 16-AUG-2000.
PD

```

```

XX 06-SEP-1999; 99EP-00307066.
XX
XX 04-FEB-1999; 99US-0118564P.
PR 09-APR-1999; 99US-00288679.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Ravikumar VT, Manoharan M, Capaldi DC, Krotz A, Cole DL;
PI Guzaev A;
PI
XX
XX WPI; 2000-500332/45.
XX
XX Novel method for the production of oligomers with reduced exocyclic
PT adducts comprises treatment with deprotecting and cleaving reagents.
XX
XX Example 2; Page 17; 33pp; English.
XX
XX This invention describes a novel synthetic method (M) comprising: (a)
CC providing a sample comprising a number of oligomers of formula (I); (b)
CC contacting the sample with a deprotecting agent to remove R_t groups from
CC the oligomers; and (c) reacting the oligomer with a cleaving reagent. The
CC method is used to produce oligomeric compounds for use in antisense and
CC oligonucleotide therapies. The method enables the synthesis of oligomers
CC with a reduction in the number acrylonitrile groups attached.
CC Acrylonitrile has been demonstrated to be a potent carcinogen in rats.
CC This sequence represents a phosphorothioate 20-mer primer which is used
CC in the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02; Mismatches 0; Gaps 0;
Matches 19; Conservative 0; Indels 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 780
AAC62454/C
ID AAC62454 standard; DNA; 19 BP.
XX
XX AAC62454;
XX
XX 07-FEB-2001 (first entry)
XX
XX Cleavage of nucleic acids from solid supports assay oligonucleotide #3.
XX
XX Nucleic acid cleavage; solid support; DNA-RNA hybrid;
KW affinity chromatography; sequencing; mutagenesis; DNA preparation;
KW nucleic acid purification; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FT misc_RNA 10
FT /*tag= a
XX
XX WO200058329-A1.
XX
XX 05-OCT-2000.
XX
XX 28-MAR-2000; 2000WO-GB001190.
XX
XX 29-MAR-1999; 99GB-00007245.
XX
XX (GOLD/) GOLDSBOROUGH A.
XX
XX WPI; 2000-664908/64.
XX
XX Detaching nucleic acid molecule comprising unconventional nucleotide
PT

```

PT incorporated at predetermined site from a solid support involves cleaving
 FT the nucleic acid molecule at the site of unconventional nucleotide.

Example 3; Page 34; 47pp; English.

CC The present invention is concerned with the cleavage of nucleic acids
 CC from solid supports. This is carried out by adding a non-conventional
 CC nucleotide into the nucleic acid attached to the support, so that it is
 CC recognised and cleaved by a specific DNA glycosylase and the sequence is
 CC released. This is useful in many molecular biological procedures such as
 CC sequencing, in vitro amplifications, cDNA and template preparation, DNA-
 CC based assays, mutagenesis procedures, nucleic acid purification and
 CC affinity chromatography. The present invention is an oligonucleotide used
 CC in assays to demonstrate the methods of the invention

XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 1 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727

DB 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 781

AAF31458/c

ID AAF31458 standard; DNA; 19 BP.

XX AAF31458;

AC AAF31458;

DT 10-APR-2001 (first entry)

XX Oligonucleotide ISIS 109989.

DE Gene expression; gene therapy; diagnosis; ss.

XX Synthetic.

OS Synthetic.

XX WO200102423-A2.

PN 11-JAN-2001.

XX 07-JUL-2000; 2000WO-US018609.

XX 07-JUL-1999; 99US-00349040.

XX (ISIS-) ISIS PHARM INC.

XX Manoharan M, Cook PD, Prakash TP, Mohan V;

XX WPI; 2001-138119/14.

XX Quantidium functionalized oligomers prepared from corresponding monomer

XX units, are hybridizable with a specific RNA or DNA sequence, useful for

XX diagnostic and therapeutic purposes.

XX Example 26; Page 54; 108pp; English.

XX The present invention relates to nucleotide oligomers comprising monomer

XX units. Oligomers modulate gene expression when hybridized by a single- or

XX double-stranded nucleic acid. They are useful for gene therapy,

XX diagnostic and investigative purposes

XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 19; DB 1; Length 19;

XX Best Local Similarity 100.0%; Pred. No. 7.7e+02;

XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727

DB 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 783

AAH46460/c

ID AAH46460 standard; DNA; 19 BP.

XX AAH46460;

XX 14-SEP-2001 (first entry)

XX Oligonucleotide #8.

XX Phosphorothioate; anti-viral therapy; stereochemical pathway; ss.

XX Synthetic.

XX Key Location/Qualifiers

XX modified_base 1..19

XX /*tag= a

XX /mod_base= OTHER

XX FT

XX FT

XX FT

XX FT

Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 782

AAF31564/c

ID AAF31564 standard; DNA; 19 BP.

XX AAF31564;

AC AAF31564;

DT 09-APR-2001 (first entry)

XX ISIS sequence 32327.

DE DNA/RNA hybrid; oligomer; C3' methylene hydrogen phosphate; AIDS;

XX atherosclerosis; ss.

XX Synthetic.

XX WO200102419-A1.

XX 11-JAN-2001.

XX 05-JUL-2000; 2000WO-US040304.

XX 07-JUL-1999; 99US-00349033.

XX (ISIS-) ISIS PHARM INC.

XX Cook PD, Manoharan M, Maier M, An H;

XX WPI; 2001-138117/14.

XX New oligomers for use as research reagent, for treating disease caused by

XX undesired production of proteins, and for diagnosing and treating AIDS,

XX atherosclerosis.

XX Example 46; Page 74; 110pp; English.

XX The present invention relates to C3' methylene hydrogen phosphate

XX oligomers. The oligomers may be used as research reagents, for treating

XX disease caused by undesired production of proteins and for diagnosing and

XX treating AIDS and atherosclerosis

XX Sequence 19 BP; 0 A; 0 C; 0 G; 15 T; 4 U; 0 Other;

XX Query Match 0.7%; Score 19; DB 1; Length 19;

XX Best Local Similarity 100.0%; Pred. No. 7.7e+02;

XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727

DB 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 783

AAH46460/c

ID AAH46460 standard; DNA; 19 BP.

XX AAH46460;

XX 14-SEP-2001 (first entry)

XX Oligonucleotide #8.

XX Phosphorothioate; anti-viral therapy; stereochemical pathway; ss.

XX Synthetic.

XX Key Location/Qualifiers

XX modified_base 1..19

XX /*tag= a

XX /mod_base= OTHER

XX FT

XX FT

XX FT

XX FT

```

FT modified_base 1
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Modified with 2'-O-methoxyethyl"
PN
XX
PD
XX
XX
PF 29-SEP-2000; 2000WO-US026729.
XX
XX
PR 30-SEP-1999; 99US-00409926.
XX
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX
PI Crooke ST, Lima WF, Wu H, Manoharan M;
XX
XX
DR WPI; 2001-343164/36.
XX
XX
PT Chimeric oligonucleotides that can serve as substrates for human RNase
FT HI, useful for enhancing the effectiveness of antisense gene therapies.
XX
XX
PS Example 54; Page 88; 178pp; English.
XX
XX
CC The present invention provides a number of DNA-RNA oligonucleotides which
CC can act as substrates for human RNase HI (a type II RNase). The sequence
CC consists of two portions, one of which is capable of supporting cleavage
CC of a complementary target RNA and the other of which is incapable of
CC supporting such cleavage. These can be used to enhance the effectiveness
CC of antisense therapies. The present sequence is an RNase H substrate used
CC in the exemplification of the invention
XX
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
DB 19 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 785
AAH25737/c
ID AAH25737 standard; DNA; 19 BP.
XX
XX
AC AAH25737;
XX
XX
DT 14-AUG-2001 (first entry)
XX
XX
DE Human type II RNase H substrate oligonucleotide #5.
XX
XX
KW Human; RNase H type II; RNase HI cleavage substrate; antisense therapy;
KW gene therapy; primer; phosphorothioate backbone; ss.
XX
XX
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "optionally phosphorothioate backbone"
FT modified_base 16..19
FT /*tag= b
FT /mod_base= OTHER
FT /note= "optionally 3'-O-(2-methoxyethyl) or 2'-O-(2-
FT methoxyethyl)"
FT misc_RNA 19
FT /*tag= c
XX
XX
FT WO200123613-A1.
XX
XX
PD 05-APR-2001.
XX
XX
PF 29-SEP-2000; 2000WO-US026729.
XX
XX
PR 30-SEP-1999; 99US-00409926.
XX
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX
PI Crooke ST, Lima WF, Wu H, Manoharan M;
XX
XX
DR WPI; 2001-343164/36.
XX
XX
PT Chimeric oligonucleotides that can serve as substrates for human RNase
FT HI, useful for enhancing the effectiveness of antisense gene therapies.
XX
XX
PS Example 54; Page 88; 178pp; English.
XX
XX
CC The present invention provides a number of DNA-RNA oligonucleotides which
CC can act as substrates for human RNase HI (a type II RNase). The sequence
CC consists of two portions, one of which is capable of supporting cleavage
CC of a complementary target RNA and the other of which is incapable of
CC supporting such cleavage. These can be used to enhance the effectiveness
CC of antisense therapies. The present sequence is an RNase H substrate used
CC in the exemplification of the invention
XX
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
DB 19 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 784
AAH25737/c
ID AAH25737 standard; DNA; 19 BP.
XX
XX
AC AAH25737;
XX
XX
DT 14-AUG-2001 (first entry)
XX
XX
DE Human type II RNase H substrate oligonucleotide #4.
XX
XX
KW Human; RNase H type II; RNase HI cleavage substrate; antisense therapy;
KW gene therapy; primer; phosphorothioate backbone; ss.
XX
XX
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "optionally phosphorothioate backbone"
FT modified_base 16..19
FT /*tag= b
FT /mod_base= OTHER
FT /note= "optionally 3'-O-(2-methoxyethyl) or 2'-O-(2-
FT methoxyethyl)"
FT misc_RNA 19
FT /*tag= c
XX
XX
FT WO200123613-A1.
XX
XX
PD 05-APR-2001.
XX
XX
PF 29-SEP-2000; 2000WO-US026729.
XX
XX
PR 30-SEP-1999; 99US-00409926.
XX
XX

```

XX PA (ISIS-) ISIS PHARM INC.
 XX FI Crooke ST, Lima WF, Wu H, Manoharan M;
 XX DR WPI; 2001-343164/36.
 XX PT Chimeric oligonucleotides that can serve as substrates for human RNase
 XX FI HI, useful for enhancing the effectiveness of antisense gene therapies.
 XX PS Example 54; Page 88; 178pp; English.
 XX CC The present invention provides a number of DNA-RNA oligonucleotides which
 XX CC can act as substrates for human RNase HI (a type II RNase). The sequence
 XX CC consists of two portions, one of which is capable of supporting cleavage
 XX CC of a complementary target RNA and the other of which is incapable of
 XX CC supporting such cleavage. These can be used to enhance the effectiveness
 XX CC of antisense therapies. The present sequence is an RNase H substrate used
 XX CC in the exemplification of the invention
 XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 1 U; 0 Other;
 Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAA 2727
 Db 19 AAAAAAAAAAAAAAAAAA 1
 RESULT 786
 AAC83664/c
 ID AAC83664 standard; DNA; 19 BP.
 AC AAC83664;
 XX
 DT 02-MAR-2001. (first entry)
 XX
 DE 2'-O-N-[2-(dimethylamino)ethylacetamido]-modified oligo ISIS #32335.
 XX
 KW 2'-O-acetamido; diagnostic; kinase modulator; nuclease resistance;
 KW tumour formation; cancer; protein kinase C expression;
 KW cell adhesion molecule expression; multidrug resistance; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 16..19
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-N-[2-(dimethylamino)ethylacetamido]5MeU"
 XX
 PN US6147200-A.
 XX
 PD 14-NOV-2000.
 XX
 PF 19-AUG-1999; 99US-00378568.
 XX
 PR 19-AUG-1999; 99US-00378568.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX Manoharan M, Cook PD, Fraser AS, Prakash TP, Kawasaki AM;
 XX WPI; 2001-069824/08.
 XX
 XX New 2'-O-acetamido modified nucleosides (I) used to produce
 XX PT oligonucleotides which have enhanced nuclease resistance and superior
 XX PT hybridization properties than prior art.
 XX
 XX Example 12; Col 28; 29pp; English.
 XX

CC The present sequence is a modified oligonucleotide. 2'-O-acetamido-
 CC modified nucleosides were used to produce oligonucleotides which have
 CC enhanced nuclease resistance and superior hybridisation properties than
 CC prior art. The oligomeric compounds are useful for identification or
 CC quantification of ribonucleic acid and deoxyribonucleic acid or for
 CC modulating the activity of an ribonucleic acid or deoxyribonucleic acid
 CC molecule. They have a modified nucleoside monomer and are specifically
 CC hybridisable with a preselected nucleotide sequence of a single-stranded
 CC or double-stranded target deoxyribonucleic acid or ribonucleic acid
 CC molecule. The oligomers are further useful in a ras-luciferase fusion
 CC system using ras-luciferase transactivation. They are useful in abnormal
 CC cell proliferation and tumour formation and modulation of expression of
 CC protein kinase C and cell adhesion molecules such as ICAM. They are
 CC useful in the modulation of proteins related to multidrug resistance and
 CC viral genomic nucleic acids such as HOV, herpes viruses, Epstein-Barr
 CC virus, cytomegalovirus, papillomavirus, hepatitis C virus and influenza
 CC virus
 XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAA 2727
 Db 19 AAAAAAAAAAAAAAAAAA 1
 RESULT 787
 AAK98526/c
 ID AAK98526 standard; DNA; 19 BP.
 XX
 AC AAK98526;
 XX
 DT 16-APR-2002 (first entry)
 XX
 DE Nucleic acid quantitative analysis related oligonucleotide #1.
 XX
 KW Target detection; quantitative analysis; probe; medical diagnosis;
 KW forensics; bacterial screening; tissue typing; gene expression analysis;
 KW genotyping; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "modified by thiol"
 XX
 PN W0200202810-A2.
 XX
 PD 10-JAN-2002.
 XX
 PF 02-JUL-2001; 2001WO-EP007575.
 XX
 PR 01-JUL-2000; 2000DE-01033334.
 XX
 XX (CLON-) CLONDIAG CHIP TECHNOLOGIES GMBH.
 XX Bickel R, Ehrlich R, Ellinger T, Ermantraut E, Kaiser T;
 XX Schulz T, Wagner G;
 XX WPI; 2002-154760/20.
 XX
 XX Determining targets by interaction with probe array, useful e.g. for
 XX PT diagnosis, based on detecting formation of precipitate at specific probe
 XX PT sites.
 XX
 XX Example 5; Page 47; 92pp; German.
 XX
 XX The present invention relates to a method for the qualitative and

CC quantitative detection of targets in a sample by molecular interaction
 CC between the target and probes in an array. The method can be used to
 CC detect interactions between nucleic acids, antigens and antibodies or
 CC receptor and ligands, particularly in applications such as medical
 CC diagnosis, forensic science, bacterial screening, tissue typing for
 CC transplantation, monitoring gene expression, and genotyping. The present
 CC sequence is a modifying oligonucleotide used in the exemplification of
 CC the invention
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2727
 Db 19 AAAAAAAAAAAAAAAAAA 1
 RESULT 788
 ABA91949/c
 ID ABA91949 standard; DNA; 19 BP.
 XX
 AC ABA91949;
 XX
 DT 23-MAY-2002 (first entry)
 XX
 DE Methyl thioethyl modified oligonucleotide.
 XX
 KW 2'-O-alkyl oligonucleotide; nuclease resistance; diagnosis; therapy; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 16
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-methyl thioethyl thymidine"
 FT modified_base 17
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-methyl thioethyl thymidine"
 FT modified_base 18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methyl thioethyl thymidine"
 FT modified_base 19
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "2'-methyl thioethyl thymidine"
 FT
 XX US6277982-B1.
 XX
 PN 21-AUG-2001.
 XX
 PD 20-AUG-1999; 99US-00378665.
 XX
 PF 20-AUG-1999; 99US-00378665.
 XX
 PR 20-AUG-1999; 99US-00378665.
 XX
 XX (ISIS-) ISIS PHARM INC.
 PA
 PI Fraser AS, Manoharan M, Cook PD, Jung ME, Kawasaki AM;
 XX
 XX WPI; 2002-235143/29.
 XX
 XX Alkylation of alcohols, amines, or thiols, useful for preparing
 PT nucleosides that are precursors for preparation of oligomeric compounds
 FT beneficial as therapeutics, involves use of cyclic sulfate intermediates.
 PT
 XX Example 15; Col 35; 45pp; English.
 XX
 XX The present sequence is that of a chimeric oligonucleotide having some 2'

CC -methyl thioethyl modifications. This was compared with oligonucleotides
 CC with methoxyethoxy (see ABA91950) and dimethylaminopropyl (see ABA91951)
 CC modifications for resistance to snake venom phosphodiesterase. The assay
 CC revealed the nuclease resistance of the modified oligomers. The invention
 CC provides methods for the alkylation of alcohols, amines, thiols and their
 CC derivatives by cyclic sulfate intermediates. In particular, methods for
 CC the alkylation of the 2', 3' or 5'-hydroxy position of nucleosides and
 CC their analogues with cyclic sulfates to form the 2', 3' or 5'-O-alkyl
 CC sulfate modified compounds are disclosed. Displacement of the 2', 3' or
 CC 5'-O-sulfate with a nucleophile provides 2', 3' or 5'-O-modified
 CC nucleosides and their analogues. The methods are especially useful for
 CC the preparation of 2'-O-alkyl nucleotides, nucleosides and nucleoside
 CC surrogates that are precursors for the preparation of oligomeric
 CC compounds useful as therapeutics, diagnostics and research reagents
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2727
 Db 19 AAAAAAAAAAAAAAAAAA 1
 RESULT 789
 ABA91951/c
 ID ABA91951 standard; DNA; 19 BP.
 XX
 AC ABA91951;
 XX
 DT 23-MAY-2002 (first entry)
 XX
 DE Dimethylaminopropyl modified oligonucleotide.
 XX
 KW 2'-O-alkyl oligonucleotide; nuclease resistance; diagnosis; therapy; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 16
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-dimethylaminopropyl thymidine"
 FT modified_base 17
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-dimethylaminopropyl thymidine"
 FT modified_base 18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-dimethylaminopropyl thymidine"
 FT modified_base 19
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "2'-dimethylaminopropyl thymidine"
 FT
 XX US6277982-B1.
 XX
 PN 21-AUG-2001.
 XX
 PD 20-AUG-1999; 99US-00378665.
 XX
 PF 20-AUG-1999; 99US-00378665.
 XX
 PR 20-AUG-1999; 99US-00378665.
 XX
 XX (ISIS-) ISIS PHARM INC.
 PA
 PI Fraser AS, Manoharan M, Cook PD, Jung ME, Kawasaki AM;
 XX
 XX WPI; 2002-235143/29.
 XX
 XX Alkylation of alcohols, amines, or thiols, useful for preparing


```

PT nucleosides that are precursors for preparation of oligomeric compounds
XX beneficial as therapeutics, involves use of cyclic sulfate intermediates.
PS Example 15; Col 35; 45pp; English.
XX
CC The present sequence is that of a chimeric oligonucleotide having some 2'
CC -dimethylaminopropyl modifications. This was compared with
CC oligonucleotides with methyl thioethyl (see ABA91949) and methoxyethoxy
CC (see ABA91950) modifications for resistance to snake venom phosphodiesterase.
CC The assay revealed the nuclease resistance of the modified oligomers. The
CC modified oligomers. The invention provides methods for the alkylation of
CC alcohols, amines, thiols and their derivatives by cyclic sulfate
CC intermediates. In particular, methods for the alkylation of the 2', 3' or
CC 5'-hydroxy position of nucleosides and their analogues with cyclic
CC sulfates to form the 2', 3' or 5'-O-alkyl sulfate modified compounds are
CC disclosed. Displacement of the 2', 3' or 5'-O-sulfate with a nucleophile
CC provides 2', 3' or 5'-O-modified nucleosides and their analogues. The
CC methods are especially useful for the preparation of 2'-O-alkyl
CC nucleotides, nucleosides and nucleoside surrogates that are precursors
CC for the preparation of oligomeric compounds useful as therapeutics,
CC diagnostics and research reagents
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 790
ABA91950/c
ID ABA91950 standard; DNA; 19 BP.
XX
AC ABA91950;
XX
DT 23-MAY-2002 (first entry)
XX
DE Methoxyethoxy modified oligonucleotide.
XX
KW 2'-O-alkyl oligonucleotide; nuclease resistance; diagnosis; therapy; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 16
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-methoxyethoxy thymidine"
FT modified_base 17
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-methoxyethoxy thymidine"
FT modified_base 18
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethoxy thymidine"
FT modified_base 19
FT /*tag= d
FT /mod_base= OTHER
FT /note= "2'-methoxyethoxy thymidine"
XX
PN US6277982-B1.
XX
XX 21-AUG-2001.
XX
XX 20-AUG-1999; 99US-00378665.
XX
XX 20-AUG-1999; 99US-00378665.
XX

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PA (ISIS-) ISIS PHARM INC.
XX
PI Fraser AS, Manoharan M, Cook PD, Jung ME, Kawasaki AM;
XX
DR WPI; 2002-235143/29.
XX
XX Alkylation of alcohols, amines, or thiols, useful for preparing
XX nucleosides that are precursors for preparation of oligomeric compounds
XX beneficial as therapeutics, involves use of cyclic sulfate intermediates.
XX Example 15; Col 35; 45pp; English.
XX
CC The present sequence is that of a chimeric oligonucleotide having some 2'
CC -methoxyethoxy modifications. This was compared with oligonucleotides
CC with methyl thioethyl (see ABA91949) and dimethylaminopropyl (see
CC ABA91951) modifications for resistance to snake venom phosphodiesterase.
CC The assay revealed the nuclease resistance of the modified oligomers. The
CC invention provides methods for the alkylation of alcohols, amines, thiols
CC and their derivatives by cyclic sulfate intermediates. In particular,
CC methods for the alkylation of the 2', 3' or 5'-hydroxy position of
CC nucleosides and their analogues with cyclic sulfates to form the 2', 3'
CC or 5'-O-alkyl sulfate modified compounds are disclosed. Displacement of
CC the 2', 3' or 5'-O-sulfate with a nucleophile provides 2', 3' or 5'-O-
CC modified nucleosides and their analogues. The methods are, especially
CC useful for the preparation of 2'-O-alkyl nucleotides, nucleosides and
CC nucleoside surrogates that are precursors for the preparation of
CC oligomeric compounds useful as therapeutics, diagnostics and research
CC reagents
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 791
ABL51520/c
ID ABL51520 standard; DNA; 19 BP.
XX
AC ABL51520;
XX
DT 01-JUL-2002 (first entry)
XX
DE Tailing reaction related exemplary primer biotin-dT18U SEQ ID NO:1.
XX
KW Tailing reaction; tailed primer; primer; probe; identification;
KW detection; linear amplification scheme; chain extending enzyme;
KW telomerase; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /mod_base= OTHER
FT /note= "biotinylated"
FT misc_RNA 19
FT /*tag= b
XX
PN US2002031776-A1.
XX
XX 14-MAR-2002.
XX
XX 26-JUL-2001; 2001US-00917138.
XX
XX 28-MAY-1999; 99US-0136545P.
XX
XX 25-MAY-2000; 2000US-00580358.
XX

```


PT nucleoside in aprotic solvent, cooling, treating with base, warming,
 PT cooling and reacting with ester.
 XX
 PS Example 46; Col 33; 24pp; English.
 CC The present invention relates to a novel method of selective alkylation
 CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
 CC The method involves dissolving the nucleoside in at least one aprotic
 CC solvent, cooling, treating with base, warming, cooling and reacting with
 CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
 CC nucleotides, nucleosides and nucleoside surrogates used for preparation
 CC of oligomeric compounds having improved hybridisation affinity and
 CC nuclear resistance, which are useful as therapeutics, diagnostics and
 CC research reagents. The present sequence is a modified oligonucleotide
 CC used to illustrate the method of the invention
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 XX
 Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1
 XX
 RESULT 794
 AAD42004/c
 ID AAD42004 standard; DNA; 19 BP.
 XX
 AC AAD42004;
 XX
 DT 04-NOV-2002 (first entry)
 XX
 DE Oligonucleotide #7 used to illustrate the method of the invention.
 XX
 KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
 KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT modified_base 18
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "5-methyl, 2'-dimethylaminoxyethyl residue"
 XX
 PN US6403779-B1.
 XX
 PD 11-JUN-2002.
 XX
 PF 08-JAN-1999; 99US-00227782.
 XX
 PR 08-JAN-1999; 99US-00227782.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
 XX WPI; 2002-546338/58.
 XX
 PT Alkylating 2' position of 2', 3'-dihydroxy sugar moiety of nucleoside used
 PT for preparation of 2'-O-alkylated compounds comprises dissolving
 PT nucleoside in aprotic solvent, cooling, treating with base, warming,
 PT cooling and reacting with ester.
 XX
 PS Example 46; Col 33; 24pp; English.
 XX
 CC The present invention relates to a novel method of selective alkylation
 CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
 CC The method involves dissolving the nucleoside in at least one aprotic
 CC solvent, cooling, treating with base, warming, cooling and reacting with
 CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
 CC nucleotides, nucleosides and nucleoside surrogates used for preparation
 CC of oligomeric compounds having improved hybridisation affinity and
 CC nuclear resistance, which are useful as therapeutics, diagnostics and
 CC research reagents. The present sequence is a modified oligonucleotide
 CC used to illustrate the method of the invention

CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
 CC nucleotides, nucleosides and nucleoside surrogates used for preparation
 CC of oligomeric compounds having improved hybridisation affinity and
 CC nuclear resistance, which are useful as therapeutics, diagnostics and
 CC research reagents. The present sequence is a modified oligonucleotide
 CC used to illustrate the method of the invention
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
 XX
 Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1
 XX
 RESULT 795
 AAD42010/c
 ID AAD42010 standard; DNA; 19 BP.
 XX
 AC AAD42010;
 XX
 DT 04-NOV-2002 (first entry)
 XX
 DE Oligonucleotide #13 used to illustrate the method of the invention.
 XX
 KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
 KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT modified_base 16..19
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-dimethylaminoxyethyl thymidine (T-2'DMAOE)"
 FT modified_base 18..19
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 XX
 PN US6403779-B1.
 XX
 PD 11-JUN-2002.
 XX
 PF 08-JAN-1999; 99US-00227782.
 XX
 PR 08-JAN-1999; 99US-00227782.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
 XX WPI; 2002-546338/58.
 XX
 PT Alkylating 2' position of 2', 3'-dihydroxy sugar moiety of nucleoside used
 PT for preparation of 2'-O-alkylated compounds comprises dissolving
 PT nucleoside in aprotic solvent, cooling, treating with base, warming,
 PT cooling and reacting with ester.
 XX
 PS Example 46; Col 35; 24pp; English.
 XX
 CC The present invention relates to a novel method of selective alkylation
 CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
 CC The method involves dissolving the nucleoside in at least one aprotic
 CC solvent, cooling, treating with base, warming, cooling and reacting with
 CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
 CC nucleotides, nucleosides and nucleoside surrogates used for preparation
 CC of oligomeric compounds having improved hybridisation affinity and
 CC nuclear resistance, which are useful as therapeutics, diagnostics and
 CC research reagents. The present sequence is a modified oligonucleotide
 CC used to illustrate the method of the invention

```

CC used to illustrate the method of the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match      0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 796
AAD42020/C
ID AAD42020 standard; DNA; 19 BP.
XX
AC AAD42020;
XX
DT 04-NOV-2002 (first entry)
XX
DE Oligonucleotide #23 used to illustrate the method of the invention.
XX
KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 15..18
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methyleneiminoxyethyl thymidine"
XX
PN US6403779-B1.
XX
PD 11-JUN-2002.
XX
PF 08-JAN-1999; 99US-00227782.
XX
PR 08-JAN-1999; 99US-00227782.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX
DR WPI; 2002-546338/58.
XX
PT Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
PT for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
XX
PS Example 46; Col 41; 24pp; English.
XX
CC The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleotides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutics, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match      0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727

```

```

Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 797
AAD42001/C
ID AAD42001 standard; DNA; 19 BP.
XX
AC AAD42001;
XX
DT 04-NOV-2002 (first entry)
XX
DE Oligonucleotide #4 used to illustrate the method of the invention.
XX
KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 16..19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "5-methyl, 2'-dimethylaminoxyethyl residues"
XX
PN US6403779-B1.
XX
PD 11-JUN-2002.
XX
PF 08-JAN-1999; 99US-00227782.
XX
PR 08-JAN-1999; 99US-00227782.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX
DR WPI; 2002-546338/58.
XX
PT Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
PT for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
XX
PS Example 46; Col 31; 24pp; English.
XX
CC The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleotides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutics, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match      0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 798
AAD42011/C
ID AAD42011 standard; DNA; 19 BP.
XX
AC AAD42011;

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PD 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
XX
PR 08-JAN-1999; 99US-00227782.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX Kawaasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
PI
XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
PT
XX Example 46; Col 33; 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleotides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutics, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 801
AAD41998/c
ID AAD41998 standard; DNA; 19 BP.
XX
XX AAD41998;
XX
XX 04-NOV-2002 (first entry)
XX
XX Oligonucleotide #1 used to illustrate the method of the invention.
XX
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
XX nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 15..18
XX /*tag= a
XX /mod_base= OTHER
XX /note= "5-methyl, 2'-aminooxyethoxy (2'-AOE) residues"
XX
XX US6403779-B1.
XX
XX 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawaasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
PI
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XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
PT
XX Example 46; Col 31; 24pp; English.
XX
XX The present invention relates to a novel method of selective alkylation
CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
CC The method involves dissolving the nucleoside in at least one aprotic
CC solvent, cooling, treating with base, warming, cooling and reacting with
CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
CC nucleotides, nucleosides and nucleoside surrogates used for preparation
CC of oligomeric compounds having improved hybridisation affinity and
CC nuclear resistance, which are useful as therapeutics, diagnostics and
CC research reagents. The present sequence is a modified oligonucleotide
CC used to illustrate the method of the invention
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 802
AAD41999/c
ID AAD41999 standard; DNA; 19 BP.
XX
XX AAD41999;
XX
XX 04-NOV-2002 (first entry)
XX
XX Oligonucleotide #2 used to illustrate the method of the invention.
XX
XX Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
XX nuclear resistance; alkylation; therapeutic; diagnostic; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 15..18
XX /*tag= a
XX /mod_base= OTHER
XX /note= "5-methyl, 2'-dimethylaminooxyethoxy (2'-DMAOE)
XX residues"
XX
XX US6403779-B1.
XX
XX 11-JUN-2002.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX 08-JAN-1999; 99US-00227782.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Kawaasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
XX WPI; 2002-546338/58.
XX
XX Alkylating 2' position of 2',3'-dihydroxy sugar moiety of nucleoside used
XX for preparation of 2'-O-alkylated compounds comprises dissolving
PT nucleoside in aprotic solvent, cooling, treating with base, warming,
PT cooling and reacting with ester.
PT
XX
```

PS Example 46; Col 31; 24pp; English.

CC The present invention relates to a novel method of selective alkylation
 CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
 CC The method involves dissolving the nucleoside in at least one aprotic
 CC solvent, cooling, treating with base, warming, cooling and reacting with
 CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
 CC nucleotides, nucleosides and nucleoside surrogates used for preparation
 CC of oligomeric compounds having improved hybridisation affinity and
 CC nuclear resistance, which are useful as therapeutics, diagnostics and
 CC research reagents. The present sequence is a modified oligonucleotide
 CC used to illustrate the method of the invention

XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2727
 |||||

Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 803
 AAD42009/c

ID AAD42009 standard; DNA; 19 BP.

XX AC AAD42009;

XX DT 04-NOV-2002 (first entry)

XX DE Oligonucleotide #12 used to illustrate the method of the invention.

XX KW Dihydroxy sugar moiety; 2'-O-alkyl nucleotide; hybridisation affinity;
 KW nuclear resistance; alkylation; therapeutic; diagnostic; ss.

XX OS Unidentified.

XX FH Key Location/Qualifiers

FT modified_base 15..18
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-dimethylaminoxyethyl thymidine (T-2'DMAOE)"

XX US6403779-B1.

XX 11-JUN-2002.

XX 08-JAN-1999; 99US-00227782.

XX 08-JAN-1999; 99US-00227782.

XX (ISIS-) ISIS PHARM INC.

XX Kawasaki AM, Fraser AS, Manoharan M, Cook PD, Prakash TP;
 WPI; 2002-546338/58.

XX Alkylating 2' position of 2', 3'-dihydroxy sugar moiety of nucleoside used
 FT for preparation of 2'-O-alkylated compounds comprises dissolving
 FT nucleoside in aprotic solvent, cooling, treating with base, warming,
 FT cooling and reacting with ester.

XX Example 46; Col 35; 24pp; English.

XX PS The present invention relates to a novel method of selective alkylation
 CC of the 2' position of 2', 3'-dihydroxy sugar moieties of a nucleoside.
 CC The method involves dissolving the nucleoside in at least one aprotic
 CC solvent, cooling, treating with base, warming, cooling and reacting with
 CC a reactive ester. The method is useful for the preparation of 2'-O-alkyl
 CC nucleotides, nucleosides and nucleoside surrogates used for preparation
 CC of oligomeric compounds having improved hybridisation affinity and

CC nuclear resistance, which are useful as therapeutics, diagnostics and
 CC research reagents. The present sequence is a modified oligonucleotide
 CC used to illustrate the method of the invention

XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2727
 |||||

Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 804
 ABZ58336/c

ID ABZ58336 standard; DNA; 19 BP.

XX AC ABZ58336;

XX DT 28-APR-2003 (first entry)

XX DE Oligonucleotide with 2'-O-(2-(methylthio)ethyl)-5-methyluridine.

XX KW Oligonucleotide; 2'-O-(2-(methylthio)ethyl)-5-methyluridine; antisense;
 KW DNA-RNA hybrid; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT modified_base 16
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methylthio)ethyl)-5-methyluridine"

FT modified_base 17
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methylthio)ethyl)-5-methyluridine"

FT modified_base 18
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methylthio)ethyl)-5-methyluridine"

FT modified_base 19
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "2'-O-(2-methylthio)ethyl)-5-methyluridine"

XX WO2003004603-A2.

XX 16-JAN-2003.

XX 01-JUL-2002; 2002WO-US020940.

XX 03-JUL-2001; 2001US-0302683P.

XX 28-JAN-2002; 2002US-00058740.

XX (ISIS-) ISIS PHARM INC.

XX Prakash TP, Manoharan M;
 WPI; 2003-239204/23.

XX Increasing binding of oligomeric compound to proteins useful in
 FT preparation of antisense therapeutics, involves use of modified
 FT oligomeric compound having oligonucleotide group.

XX Example 27; Page 72; 122pp; English.

XX The present sequence is an example of an oligonucleotide of the invention
 CC containing 2'-O-(2-(methylthio)ethyl)-5-methyluridine (2'-O-(MTE)-5-
 CC methyluridine) modifications. In examples of the invention, 2'-O-MTE was
 CC incorporated into oligonucleotides and evaluated for antisense properties

```

CC in comparison with the known 2'-O-(2-methoxyethyl) (2'-O-MOE)
CC modification. The 2'-O-MTE modified oligonucleotides exhibited similar
CC binding affinity to target RNA as their 2'-O-MOE equivalent while binding
CC to human serum albumin was improved. The modification can be used to
CC modulate the pharmacokinetics of oligonucleotides, e.g. in antisense
CC therapy
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 15 T; 4 U; 0 Other;
    Query Match      0.7%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 7.7e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 805
ADE99245/c
ID ADE99245 standard; DNA; 19 BP.
XX
AC ADE99245;
XX
DT 12-FEB-2004 (first entry)
XX
DE Modified oligomeric compound #5.
XX
KW Oligomeric compound; hepatitis C virus; 2'-O-modification;
KW nuclease resistance; hepatotropic; virucide; antiinflammatory; ss.
XX
OS Synthetic.
XX
PN US6600032-B1.
XX
PD 29-JUL-2003.
XX
PF 06-AUG-1999; 99US-00370625.
XX
PR 07-AUG-1998; 98US-00130566.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD;
XX
WPI; 2003-895259/82.
XX
New oligomeric compound having at least one nucleoside useful for
therapeutic and investigative purposes e.g. for treating hepatitis C
virus infection.
XX
Disclosure; SEQ ID NO 5; 26pp; English.
XX
The invention relates to oligomeric compounds having at least one
nucleoside. The compounds are useful for therapeutic and investigative
purposes and for treating hepatitis C virus infection. The compounds
having 2'-O-modifications increases their affinity and nuclease
resistance. This sequence represents an oligomeric compound of the
invention.
XX
Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
    Query Match      0.7%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 7.7e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

PS Disclosure; SEQ ID NO 5; 26pp; English.
XX
The invention relates to oligomeric compounds having at least one
nucleoside. The compounds are useful for therapeutic and investigative
purposes and for treating hepatitis C virus infection. The compounds
having 2'-O-modifications increases their affinity and nuclease
resistance. This sequence represents an oligomeric compound of the
invention.
XX
Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
    Query Match      0.7%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 7.7e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 806
ADE99265/c
ID ADE99265 standard; DNA; 19 BP.
XX
AC ADE99265;
XX
DT 12-FEB-2004 (first entry)
XX
DE Modified oligomeric compound #26.
XX
KW Oligomeric compound; hepatitis C virus; 2'-O-modification;
KW nuclease resistance; hepatotropic; virucide; antiinflammatory; ss.
XX
OS Synthetic.
XX
PN US6600032-B1.
XX
PD 29-JUL-2003.
XX
PF 06-AUG-1999; 99US-00370625.
XX
PR 07-AUG-1998; 98US-00130566.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD;
XX
WPI; 2003-895259/82.
XX
New oligomeric compound having at least one nucleoside useful for
therapeutic and investigative purposes e.g. for treating hepatitis C
virus infection.
XX
Disclosure; SEQ ID NO 26; 26pp; English.
XX
The invention relates to oligomeric compounds having at least one
nucleoside. The compounds are useful for therapeutic and investigative
purposes and for treating hepatitis C virus infection. The compounds
having 2'-O-modifications increases their affinity and nuclease
resistance. This sequence represents an oligomeric compound of the
invention.
XX
Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
    Query Match      0.7%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 7.7e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

PS Disclosure; SEQ ID NO 26; 26pp; English.
XX
The invention relates to oligomeric compounds having at least one
nucleoside. The compounds are useful for therapeutic and investigative
purposes and for treating hepatitis C virus infection. The compounds
having 2'-O-modifications increases their affinity and nuclease
resistance. This sequence represents an oligomeric compound of the
invention.
XX
Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
    Query Match      0.7%; Score 19; DB 1; Length 19;
    Best Local Similarity 100.0%; Pred. No. 7.7e+02;
    Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 807
ADH97218/c
ID ADH97218 standard; DNA; 19 BP.
XX
AC ADH97218;
XX
DT 15-APR-2004 (first entry)
XX
DE Synthetically modified nuclease resistant oligomer #7.
XX
KW Nuclease resistance; hybrid binding; antisense technology; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-[2-(guanidinium)ethyl]"
XX
PN US6534639-B1.
XX

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```
PD 18-MAR-2003.
XX
PF 07-JUL-2000; 2000US-00612531.
XX
PR 07-JUL-1999; 99US-00349040.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
DR WPI; 2003-644179/61.
XX
XX Guanidinium functionalized oligonucleotides used for diagnostic,
PT therapeutic or investigative purposes comprises a number of nucleotide
PT units.
XX
PS Example 26; SEQ ID NO 7; 51pp; English.
XX
XX This invention relates to novel synthetically modified oligomers that
CC have increased nuclease resistance and have enhanced hybrid binding. Such
CC oligomers are useful for diagnostic and therapeutic uses such as
CC antisense technologies. The invention also discloses a method for the
CC preparation of the oligomers with modifications as fully defined in the
CC specification. The present sequence represents a synthetically modified
CC oligonucleotide of the invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Example 26; SEQ ID NO 7; 51pp; English.

This invention relates to novel synthetically modified oligomers that
have increased nuclease resistance and have enhanced hybrid binding. Such
oligomers are useful for diagnostic and therapeutic uses such as
antisense technologies. The invention also discloses a method for the
preparation of the oligomers with modifications as fully defined in the
specification. The present sequence represents a synthetically modified
oligonucleotide of the invention.

Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 808
ADH97214/c
ID ADH97214 standard; DNA; 19 BP.
AC ADH97214;
XX
DT 15-APR-2004 (first entry)
XX
DE Synthetically modified nuclease resistant oligomer #3.
XX
KW Nuclease resistance; hybrid binding; antisense technology; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 16..19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-[2-(guanidinium)ethyl]"
XX
XX US6534639-B1.
XX
PD 18-MAR-2003.
XX
PF 07-JUL-2000; 2000US-00612531.
XX
PR 07-JUL-1999; 99US-00349040.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
DR WPI; 2003-644179/61.
XX
XX Guanidinium functionalized oligonucleotides used for diagnostic,
PT therapeutic or investigative purposes comprises a number of nucleotide
PT units.
```

```
PT units.
XX
PS Example 26; SEQ ID NO 3; 51pp; English.
XX
CC This invention relates to novel synthetically modified oligomers that
CC have increased nuclease resistance and have enhanced hybrid binding. Such
CC oligomers are useful for diagnostic and therapeutic uses such as
CC antisense technologies. The invention also discloses a method for the
CC preparation of the oligomers with modifications as fully defined in the
CC specification. The present sequence represents a synthetically modified
CC oligonucleotide of the invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 809
ADH97224/c
ID ADH97224 standard; DNA; 19 BP.
AC ADH97224;
XX
DT 15-APR-2004 (first entry)
XX
DE Synthetically modified nuclease resistant oligomer #13.
XX
KW Nuclease resistance; hybrid binding; antisense technology; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 17
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-[2-(guanidinium)ethyl]"
XX
XX modified_base 19
XX /*tag= b
XX /mod_base= OTHER
XX /note= "OTHER = 2'-O-[2-(guanidinium)ethyl]"
XX
XX US6534639-B1.
XX
PD 18-MAR-2003.
XX
PF 07-JUL-2000; 2000US-00612531.
XX
PR 07-JUL-1999; 99US-00349040.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
DR WPI; 2003-644179/61.
XX
XX Guanidinium functionalized oligonucleotides used for diagnostic,
PT therapeutic or investigative purposes comprises a number of nucleotide
PT units.
XX
PS Example 26; SEQ ID NO 13; 51pp; English.
XX
XX This invention relates to novel synthetically modified oligomers that
CC have increased nuclease resistance and have enhanced hybrid binding. Such
CC oligomers are useful for diagnostic and therapeutic uses such as
CC antisense technologies. The invention also discloses a method for the
CC preparation of the oligomers with modifications as fully defined in the
CC specification. The present sequence represents a synthetically modified
CC oligonucleotide of the invention.
```



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ID  ADG48004 standard; DNA; 19 BP.
AC  ADG48004;
XX
DT  11-MAR-2004 (first entry)
XX
DE  Oligonucleotide #11 used in the exemplification of the invention.
XX
KW  Hybridisation; diagnosis; therapeutic; investigation; ss.
XX
OS  Synthetic.
XX
FH  Key Location/Qualifiers
FT  modified_base 17 /*tag= a
FT  /mod_base= OTHER
FT  modified_base 19 /*tag= b
FT  /mod_base= OTHER
FT  /note= "2'-O-[2-(guanidinium)ethyl] thymidine"
XX
PN  US2003092046-A1.
XX
PD  15-MAY-2003.
XX
PF  20-SEP-2002; 2002US-00247893.
XX
PR  07-JUL-1999; 99US-00349040.
PR  07-JUL-2000; 2000US-00612531.
XX
PA  (MANO/) MANOHARAN M.
PA  (COOK/) COOK P D.
PA  (PRAK/) PRAKASH T P.
PA  (MOHA/) MOHAN V.
XX
PI  Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
DR  WPI; 2004-031184/03.
XX
PT  New oligomers containing guanidinium groups, useful for modulating gene
PT  expression by hybridizing oligomer with single- or double-stranded
PT  nucleic acids.
XX
PS  Example 26; SEQ ID NO 13; 54pp; English.
XX
CC  The present invention relates to novel oligonucleotides comprising
CC  several nucleotide units which are specifically hybridisable with a
CC  selected sequence of RNA or DNA wherein at least one of the nucleotide
CC  moieties of the oligomer is modified to include a guanidinium group.
CC  These oligonucleotides are useful for diagnostic, therapeutic and
CC  investigative purposes. The present sequence is an oligonucleotide used
CC  in the exemplification of the invention.
XX
SQ  Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAA 2727
Db  19 AAAAAAAAAAAAAAAAAA 1

RESULT 813
ADG47998/c
ID  ADG47998 standard; DNA; 19 BP.
XX
AC  ADG47998;
XX
DT  11-MAR-2004 (first entry)
XX

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DE  Oligonucleotide #5 used in the exemplification of the invention.
XX
KW  Hybridisation; diagnosis; therapeutic; investigation; ss.
XX
OS  Synthetic.
XX
FH  Key Location/Qualifiers
FT  modified_base 19 /*tag= a
FT  /mod_base= OTHER
FT  /note= "2'-O-[2-(guanidinium)ethyl] thymidine"
XX
PN  US2003092046-A1.
XX
PD  15-MAY-2003.
XX
PF  20-SEP-2002; 2002US-00247893.
XX
PR  07-JUL-1999; 99US-00349040.
PR  07-JUL-2000; 2000US-00612531.
XX
PA  (MANO/) MANOHARAN M.
PA  (COOK/) COOK P D.
PA  (PRAK/) PRAKASH T P.
PA  (MOHA/) MOHAN V.
XX
PI  Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
DR  WPI; 2004-031184/03.
XX
PT  New oligomers containing guanidinium groups, useful for modulating gene
PT  expression by hybridizing oligomer with single- or double-stranded
PT  nucleic acids.
XX
PS  Example 26; SEQ ID NO 7; 54pp; English.
XX
CC  The present invention relates to novel oligonucleotides comprising
CC  several nucleotide units which are specifically hybridisable with a
CC  selected sequence of RNA or DNA wherein at least one of the nucleotide
CC  moieties of the oligomer is modified to include a guanidinium group.
CC  These oligonucleotides are useful for diagnostic, therapeutic and
CC  investigative purposes. The present sequence is an oligonucleotide used
CC  in the exemplification of the invention.
XX
SQ  Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY  2709 AAAAAAAAAAAAAAAAAA 2727
Db  19 AAAAAAAAAAAAAAAAAA 1

RESULT 814
ADH42933/c
ID  ADH42933 standard; DNA; 19 BP.
XX
AC  ADH42933;
XX
DT  25-MAR-2004 (first entry)
XX
DE  Guanidinium functionalised oligonucleotide ISIS #109973.
XX
KW  ss; guanidinium functionalised nucleotide; guanidinium;
KW  2-O-guanidinium ethyl; increased binding affinity.
XX
OS  Synthetic.
XX
FH  Key Location/Qualifiers
FT  modified_base 19 /*tag= a
FT

```

```
FT /mod_base= OTHER
FT /note= "OTHER = 2-O-[2-(guanidinium)-ethyl] modified"
XX
XX US6593466-B1.
XX
XX 15-JUL-2003.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
XX WPI; 2004-118052/12.
XX
XX New guanidinium functionalized nucleotide compounds useful for preparing
XX oligomers used for diagnostic, therapeutic and investigative
XX applications.
XX
XX Example 26; SEQ ID NO 5; 40pp; English.
XX
XX The invention relates to a guanidinium functionalised nucleotide
XX compounds. The guanidinium functionalised nucleotide compounds are used
XX for preparation of oligomers useful for diagnostic, therapeutic and
XX investigative applications. The 2-O-guanidinium ethyl modification
XX increases binding affinity to a target. The present sequence represents a
XX guanidinium functionalised oligonucleotide.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2727
XX Db 19 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 815
XX ADH42931/c
XX ID ADH42931 standard; DNA; 19 BP.
XX
XX AC ADH42931;
XX
XX DT 25-MAR-2004 (first entry)
XX
XX Guanidinium functionalised oligonucleotide ISIS #109990.
XX
XX ss; guanidinium functionalised nucleotide; guanidinium;
XX 2-O-guanidinium ethyl; increased binding affinity.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 16..19
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER = 2-O-[2-(guanidinium)-ethyl] modified"
XX
XX US6593466-B1.
XX
XX 15-JUL-2003.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
XX WPI; 2004-118052/12.
XX
XX New guanidinium functionalized nucleotide compounds useful for preparing
XX oligomers used for diagnostic, therapeutic and investigative
XX applications.
XX
XX Example 26; SEQ ID NO 5; 40pp; English.
XX
XX The invention relates to a guanidinium functionalised nucleotide
XX compounds. The guanidinium functionalised nucleotide compounds are used
XX for preparation of oligomers useful for diagnostic, therapeutic and
XX investigative applications. The 2-O-guanidinium ethyl modification
XX increases binding affinity to a target. The present sequence represents a
XX guanidinium functionalised oligonucleotide.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2727
XX Db 19 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 815
XX ADH42931/c
XX ID ADH42931 standard; DNA; 19 BP.
XX
XX AC ADH42931;
XX
XX DT 25-MAR-2004 (first entry)
XX
XX Guanidinium functionalised oligonucleotide ISIS #109990.
XX
XX ss; guanidinium functionalised nucleotide; guanidinium;
XX 2-O-guanidinium ethyl; increased binding affinity.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 16..19
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER = 2-O-[2-(guanidinium)-ethyl] modified"
XX
XX US6593466-B1.
XX
XX 15-JUL-2003.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD, Prakash TP, Mohan V;
```

```
XX WPI; 2004-118052/12.
XX
XX New guanidinium functionalized nucleotide compounds useful for preparing
XX oligomers used for diagnostic, therapeutic and investigative
XX applications.
XX
XX Example 26; SEQ ID NO 3; 40pp; English.
XX
XX The invention relates to a guanidinium functionalised nucleotide
XX compounds. The guanidinium functionalised nucleotide compounds are used
XX for preparation of oligomers useful for diagnostic, therapeutic and
XX investigative applications. The 2-O-guanidinium ethyl modification
XX increases binding affinity to a target. The present sequence represents a
XX guanidinium functionalised oligonucleotide.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 7.7e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2727
XX Db 19 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 816
XX ADH42932/c
XX ID ADH42932 standard; DNA; 19 BP.
XX
XX AC ADH42932;
XX
XX DT 25-MAR-2004 (first entry)
XX
XX Guanidinium functionalised oligonucleotide ISIS #109989.
XX
XX ss; guanidinium functionalised nucleotide; guanidinium;
XX 2-O-guanidinium ethyl; increased binding affinity.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 17
XX /tag= a
XX /mod_base= OTHER
XX /note= "OTHER = 2-O-[2-(guanidinium)-ethyl] modified"
XX
XX modified_base 19
XX /tag= b
XX /mod_base= OTHER
XX /note= "OTHER = 2-O-[2-(guanidinium)-ethyl] modified"
XX
XX US6593466-B1.
XX
XX 15-JUL-2003.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX 07-JUL-1999; 99US-00349040.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Cook PD, Prakash TP, Mohan V;
XX
XX WPI; 2004-118052/12.
XX
XX New guanidinium functionalized nucleotide compounds useful for preparing
XX oligomers used for diagnostic, therapeutic and investigative
XX applications.
XX
XX Example 26; SEQ ID NO 4; 40pp; English.
XX
XX The invention relates to a guanidinium functionalised nucleotide
```

CC compounds. The guanidinium functionalised nucleotide compounds are used
CC for preparation of oligomers useful for diagnostic, therapeutic and
CC investigative applications. The 2-O-guanidinium ethyl modification
CC increases binding affinity to a target. The present sequence represents a
CC guanidinium functionalised oligonucleotide.

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

```
Query Match      0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels
```

Qy 2709 AAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAA 1

Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 817

ADJ77769/C

ID ADJ77769 standard; DNA; 19 BP.

XX

AC ADJ77769;

XX
DT 06-MAY-2004 (first entry)

DE Modified antisense oligonucleotide #5.

XX
KW 2'-O-aminoethylthioethyl-modified ribosyl nucleoside;
KW antisense oligonucleotide; ss.

XX

OS Synthetic.

XX

PN US6673912-B1.

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PD 06-JAN-2004.

[illegible]

11-APR-2002; 2002US-00

XX
PB 07-1170-1000-00170

PK	07-AUG-1998;	98US-00130586.
PR	06-AUG-1999;	99US-00370625.
XX		
XX		
PA	(ISIS-) ISIS PHARM INC.	
XX		
XX	Manoharan M, Cook PD;	
PI		
PI		
XX		
XX	WPI; 2004-106293/11.	
DR		
XX		
XX		
PT	New 2'-O-aminoethylthioethyl-modified	ribosyl nucleosides useful as
PT	monomer for the synthesis of modified	anti-sense oligonucleotides.

PS Disclosure; SEQ ID NO 5; 26pp; English.

The invention relates to 2'-O-aminoethylthioethyl-modified ribosyl nucleosides. The modified ribosyl nucleosides are used as monomers for the synthesis of modified antisense oligonucleotides, which are useful in diagnosis and therapeutics (e.g. in gene therapy, for treating organisms having a disease associated with the undesired production of proteins) and as research reagents. The oligonucleotides obtained from the monomers show enhanced hybrid binding affinity towards targeted DNA or RNA and resistance towards nucleases. This sequence represents a modified antisense oligonucleotide of the invention.

Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other; ; SQ

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels

QY 2709 AAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAA 1

19 AAAAAAAAAAAAAAAAAA 1

Synthetic.

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XX WO2004020450-A1.
PN
XX
XX 11-MAR-2004.
XX
XX 29-AUG-2003; 2003WO-AU001118.
XX PF
XX 30-AUG-2002; 2002AU-00951274.
XX PR
XX (CSIR ) COMMONWEALTH SCI & IND RES ORG.
XX PA
XX McCall M, Moghaddam M;
XX PI
XX WPI; 2004-269207/25.
XX DR
XX Carbon nanotube attached with one or more nucleic acid molecules, useful
XX PT as biosensor for screening presence of bacterial or viral nucleic acid in
XX PT clinical samples.
XX
XX Example 6; Page 91; 147pp; English.
XX
XX The present invention describes a nanotube (I) attached with one or more
XX CC nucleic acid molecule(s). Also described: (1) chemically modifying (M1) a
XX CC nanotube; (2) physically modifying (M2) a nanotube; (3) linking (M3)
XX CC nanotubes; (4) a several linked nanotubes (II) produced by (M3); (5)
XX CC directing (M4) nanotubes to specific targets; (6) a nucleic acid sensor
XX CC (III) comprising (I), where the base sequence of the attached nucleic
XX CC acid molecule is substantially complementary to all or a portion of the
XX CC base sequence of the nucleic acid molecules being detected; (7) a DNA
XX CC array consisting of an array of groups of one or more nanotubes, each
XX CC group having one or more nucleic acid molecules of the same base sequence
XX CC attached to each nanotubes in the group, and where the base sequence of
XX CC the nucleic acid molecules, attached to the nanotubes in one group
XX CC differs from those in other groups so that a number of different target
XX CC DNA molecules may be detected; (8) an actuator comprising (I) and a
XX CC membrane support to which the DNA-modified nanotubes are attached; and
XX CC (9) a conductor (IV) comprising (I). (I) is useful in coating one or more
XX CC nanotubes with nanoparticles, which involves exposing (I) to
XX CC nanoparticles comprising several attached complementary nucleic acid
XX CC molecules, where the nanoparticles hybridise to the nucleic acid
XX CC molecules on the surface of the nanotube(s) as well as self-annealing to
XX CC other nanoparticles, forming one or more coated nanotubes. (I) can be
XX CC used as a biosensor for detecting complementary nucleic acid strands,
XX CC useful in clinical application for screening presence of bacterial or
XX CC viral nucleic acid, in pharmaceutical applications, agricultural
XX CC applications, food control, hygiene and environmental monitoring and
XX CC forensic applications. (II) is useful as a nano-scale conductor or
XX CC semiconductor, more specifically as a component in nano-electronic
XX CC applications, as a replacement for damaged nerves in prosthetic
XX CC applications, or as the bio-electronic interface in bio-electronic
XX CC devices. (II) can also be used as a transistor or gated device. The
XX CC present sequence represents an oligonucleotide which is used in an
XX CC example from the present invention.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 820
ADM47150/c
ID ADM47150 standard; DNA; 19 BP.
XX
XX ADM47150;
XX
XX 03-JUN-2004 (first entry)
XX

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DE 2'-O-MOE-2-thio modified oligonucleotide #3.
XX
XX ss; antisense; infection; inflammation; tumour;
KW enhanced binding affinity.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 16..19
XX /*tag= a
XX /mod_base= OTHER
XX /note= "OTHER = 2'-O- [2- (methoxy-)ethyl]-2-thio-5-
XX methyluridine"
XX
XX US2004033973-A1.
XX
XX 19-FEB-2004.
XX
XX 16-AUG-2002; 2002US-00222588.
XX
XX 16-AUG-2002; 2002US-00222588.
XX
XX (MANO/) MANOHARAN M.
XX (PRAK/) PRAKASH T P.
XX (RAJE/) RAJEEV K G.
XX
XX Manoharan M, Prakash TP, Rajeev KG;
XX
XX WPI; 2004-256363/24.
XX
XX New nucleoside compounds useful as antisense compounds to prevent or
XX delay e.g. infection, inflammation or tumor formation.
XX
XX Example 211; SEQ ID NO 17; 96pp; English.
XX
XX The invention relates to nucleoside compounds. The nucleoside compounds
XX are useful as antisense compounds in diagnostics, therapeutics,
XX prophylaxis, and as research reagents and kits, and to prevent or delay
XX infection, inflammation or tumour formation. The compounds have enhanced
XX binding affinity properties. The present sequence represents a 2'-O-MOE-2
XX -thio modified oligonucleotide.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 821
ADO58963/c
ID ADO58963 standard; DNA; 19 BP.
XX
XX ADO58963;
XX
XX 15-JUL-2004 (first entry)
XX
XX Oligonucleotide #4 used in animal studies.
XX
XX Renal uptake enhancement; therapy; infection; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
XX modified_base 16..19
XX /*tag= a
XX /mod_base= OTHER
XX /note= "Modified with 2'-O- [2-(2-N,N-dimethylaminoethyl)
XX oxyethyl]-5-methyl uridine"
XX

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XX PN US2004009938-A1.
XX PD 15-JAN-2004.
XX PF 06-FEB-2003; 2003US-00359328.
XX PR 07-AUG-1998; 98US-00130566.
XX PR 06-AUG-1999; 99US-00370625.
XX PA (MANO/) MANOHARAN M.
XX PA (COOK/) COOK P D.
XX PI Manoharan M, Cook PD;
XX PI WPI; 2004-201317/19.
XX PT Enhancing renal uptake of an oligomeric compound in the diagnostic and
XX PT therapeutic applications involves incorporating at least one modified
XX PT ribosyl nucleoside into the oligomeric compound.
XX PS Example 19; SEQ ID NO 26; 21pp; English.
XX SQ The invention relates to 2'-O-modified ribosyl nucleosides and methods of
XX SQ enhancing renal uptake of an oligomeric compound. The method is useful
XX SQ for enhancing renal uptake of an oligomeric compound. The sequences of
XX SQ the invention are useful in diagnostics, therapeutics and as research
XX SQ reagents; and for treating infection caused by organisms (e.g. bacteria,
XX SQ yeast, protozoa and algae) in plants and higher animals. The present
XX SQ sequence is an oligonucleotide used in animal studies. This sequence is
XX SQ used to illustrate the method of the invention.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 822
ADOS8942/C
ID ADO58942 standard; DNA; 19 BP.
XX AC ADO58942;
XX DT 15-JUL-2004 (first entry)
XX DE Oligo, to illustrate enzymatic degradation of 2'-O-modified oligomers.
XX KW Renal uptake enhancement; therapy; infection; ss.
XX OS Unidentified.
XX FH Key Location/Qualifiers
XX FT modified_base 16..19
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "Optionally 2'-O-modified with propyl,
XX FT methoxyethyl or DMAEOE"
XX PN US2004009938-A1.
XX PD 15-JAN-2004.
XX PF 06-FEB-2003; 2003US-00359328.
XX PR 07-AUG-1998; 98US-00130566.
XX PR 06-AUG-1999; 99US-00370625.
XX

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PA (MANO/) MANOHARAN M.
PA (COOK/) COOK P D.
PI Manoharan M, Cook PD;
PI WPI; 2004-201317/19.
XX Enhancing renal uptake of an oligomeric compound in the diagnostic and
XX PT therapeutic applications involves incorporating at least one modified
XX PT ribosyl nucleoside into the oligomeric compound.
XX PS Example 19; SEQ ID NO 5; 21pp; English.
XX SQ The invention relates to 2'-O-modified ribosyl nucleosides and methods of
XX SQ enhancing renal uptake of an oligomeric compound. The method is useful
XX SQ for enhancing renal uptake of an oligomeric compound. The sequences of
XX SQ the invention are useful in diagnostics, therapeutics and as research
XX SQ reagents; and for treating infection caused by organisms (e.g. bacteria,
XX SQ yeast, protozoa and algae) in plants and higher animals. The present
XX SQ sequence is an oligonucleotide used to illustrate enzymatic degradation
XX SQ of 2'-O-modified oligomers. This sequence is used to illustrate the
XX SQ method of the invention.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1
RESULT 823
ADOS9136/C
ID ADO59136 standard; DNA; 19 BP.
XX AC ADO59136;
XX DT 09-SEP-2004 (first entry)
XX DE Tobacco cytochrome P450 PCR primer #6.
XX KW ss; primer; PCR; cytochrome P450; transgenic; tobacco; plant.
XX OS Nicotiana sp.
XX PN US2004117869-A1.
XX PD 17-JUN-2004.
XX PF 12-MAR-2003; 2003US-00387346.
XX PR 11-JAN-2002; 2002US-0347444P.
XX PR 12-MAR-2002; 2002US-0363684P.
XX PR 10-JAN-2003; 2003US-00340861.
XX PA (USSM-) US SMOKELESS TOBACCO CO.
XX PI Xu D;
XX PI WPI; 2004-449487/42.
XX PT An isolated nucleic acid molecule, comprising nucleic acid sequence of
XX PT Nicotiana derived cytochrome P450 enzyme fragments, useful for producing
XX PT transgenic plants.
XX PS Disclosure; SEQ ID NO 154; 82pp; English.
XX SQ The invention relates to an isolated nucleic acid molecule (I),
XX SQ comprising a nucleic acid sequence chosen from 75 Nicotiana-derived
XX SQ cytochrome P450 enzyme fragment sequences. (I) is useful for producing a

```

CC transgenic tobacco plant, which involves operably linking (I) with a
 CC promoter functional in the plant to create a plant transformation vector,
 CC and transforming the plant with the plant transformation vector,
 CC selecting a plant cell transformed with the transformation vector, and
 CC regenerating a plant from the selected plant cell. The nucleic acid
 CC molecule is in an antisense orientation, sense orientation or is in a RNA
 CC interference orientation. The present sequence represents a PCR primer
 CC used to clone DNA encoding tobacco cytochrome P450 enzyme fragments of
 CC the invention.
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e-02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727

Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 824

ADR82260/c
 ID ADR82260 standard; DNA; 19 BP.

XX AC ADR82260;

XX DT 16-DEC-2004 (first entry)

XX DE Hepatitis C virus (HCV) oligonucleotide seqid 6759.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
 KW RNA interference; RNA; antisense technology; lipid metabolism;
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
 KW coronary artery disease; CAD; coronary heart disease; CHD;
 KW atherosclerosis; hepatic glucose production;
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
 KW colon cancer; lung cancer; neurological disease; Huntington disease;
 KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
 XX
 OS Hepatitis C virus.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-MAR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

XX 17-APR-2003; 2003US-0463772P.

XX 25-APR-2003; 2003US-0465665P.

XX 25-APR-2003; 2003US-0465802P.

XX 08-AUG-2003; 2003US-0469612P.

XX 11-AUG-2003; 2003US-0494597P.

XX 28-SEP-2003; 2003US-0506341P.

XX 09-OCT-2003; 2003US-0510246P.

XX 10-OCT-2003; 2003US-0510318P.

XX 07-NOV-2003; 2003US-0518453P.

XX (ALNY-) ALNYLAM PHARM.

XX Manoharan M, Bumcrot D;

PT sequence and antisense sequence which has specific modifications.
 XX Example 5; SEQ ID NO 6759; 378pp; English.

XX The invention describes a RNA interference (iRNA) agent (I) comprising a
 CC sense sequence and an antisense sequence, where the sense sequences have
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense
 CC sequences have one or more asymmetrical phosphorothioate modifications
 CC and the antisense sequence targets a human gene sequence. Also described
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);
 CC stabilising (I), involves selecting a sequence with activity and
 CC introducing one or more asymmetrical modification in the sequence, where
 CC the modification decreases nuclease sensitivity while not decreasing its
 CC activity; a kit comprising (I) and instruction for its use; and a device
 CC that can be dispense or administer a composition comprising (I). (I) is
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
 CC The subject is suffering from a disorder characterised by elevated or
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
 CC inhibit hepatic glucose production or for treating glucose-metabolism-
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
 CC lung cancer), neurological disease (e.g., Huntington disease or
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
 CC represents a hepatitis C virus (HCV) antisense oligonucleotide that can
 CC be used to control HCV gene expression.

XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e-02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727

Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 825

ADR82257/c

ID ADR82257 standard; DNA; 19 BP.

XX AC ADR82257;

XX DT 16-DEC-2004 (first entry)

XX DE Hepatitis C virus (HCV) oligonucleotide seqid 6756.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
 KW cytotatic; anticonvulsant; nootropic; muscula; anti-HIV;
 KW RNA interference; RNA; antisense technology; lipid metabolism;
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
 KW coronary artery disease; CAD; coronary heart disease; CHD;
 KW atherosclerosis; hepatic glucose production;
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
 KW colon cancer; lung cancer; neurological disease; Huntington disease;
 KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
 XX
 OS Hepatitis C virus.

XX WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX WPI; 2004-677362/66.
 XX Interference RNA agent useful for treating dyslipidaemias, coronary artery
 PT disease, diabetes, cancer or neurological disease, comprises sense

PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
PI Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
PT Interference RNA agent useful for treating dyslipidemias, coronary artery
PT disease, diabetes, cancer or neurological disease, comprises sense
PT sequence and antisense sequence which has specific modifications.
XX
PS Example 5; SEQ ID NO 6756; 378pp; English.
XX
CC The invention describes a RNA interference (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequences have
CC one or more asymmetrical 2'-O alkyl modifications, the antisense
CC sequences have one or more asymmetrical phosphorothioate modifications
CC and the antisense sequence targets a human gene sequence. Also described
CC are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
CC levels or glucose-6-phosphatase levels in a subject; producing (I);
CC stabilising (I), involves selecting a sequence with activity and
CC introducing one or more asymmetrical modification in the sequence, where
CC the modification decreases nuclease sensitivity while not decreasing its
CC activity; a kit comprising (I) and instruction for its use; and a device
CC that can be dispense or administer a composition comprising (I). (I) is
CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
CC The subject is suffering from a disorder characterised by elevated or
CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.78; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
|||||
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 826
ADR82261/c
ID ADR82261 standard; DNA; 19 BP.
XX
AC ADR82261;
XX

DT 16-DEC-2004 (first entry)
DE Hepatitis C virus (HCV) oligonucleotide seqid 6760.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
XX
OS Hepatitis C virus.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0493986P.
XX 08-AUG-2003; 2003US-0494597P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 6756; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, statin-resistant
XX hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a hepatitis C virus (HCV) antisense oligonucleotide that can
XX be used to control HCV gene expression.

CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
 CC lung cancer), neurological disease (e.g., Huntington disease or
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
 CC represents a hepatitis C virus (HCV) antisense oligonucleotide that can
 CC be used to control HCV gene expression.

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 DB 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 827
 ADR82258/c
 ID ADR82258 standard; DNA; 19 BP.
 XX
 AC ADR82258;
 XX
 DT 16-DEC-2004 (first entry)
 XX
 DE Hepatitis C virus (HCV) oligonucleotide seqid 6757.
 XX
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
 KW RNA interference; iRNA; antisense technology; lipid metabolism;
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
 KW coronary artery disease; CAD; coronary heart disease; CHD;
 KW atherosclerosis; hepatic glucose production;
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
 KW colon cancer; lung cancer; neurological disease; Huntington disease;
 KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
 XX
 OS Hepatitis C virus.
 XX
 PN WO2004080406-A2.
 XX
 PD 23-SEP-2004.
 XX
 PF 08-MAR-2004; 2004WO-US007070.
 XX
 PR 07-MAR-2003; 2003US-0452682P.
 PR 12-MAR-2003; 2003US-0454265P.
 PR 13-MAR-2003; 2003US-0454962P.
 PR 13-MAR-2003; 2003US-0455050P.
 PR 14-APR-2003; 2003US-0462894P.
 PR 17-APR-2003; 2003US-0463772P.
 PR 25-APR-2003; 2003US-0465665P.
 PR 25-APR-2003; 2003US-0465902P.
 PR 09-MAY-2003; 2003US-0469612P.
 PR 08-AUG-2003; 2003US-0493986P.
 PR 11-AUG-2003; 2003US-0494597P.
 PR 26-SEP-2003; 2003US-0506341P.
 PR 09-OCT-2003; 2003US-0510246P.
 PR 10-OCT-2003; 2003US-0510318P.
 PR 07-NOV-2003; 2003US-0518453P.
 XX
 PA (ALNY-) ALNYLAM PHARM.
 XX
 XX Manoharan M, Bumcrot D;
 XX
 XX WPI; 2004-677362/66.
 XX
 XX Interference RNA agent useful for treating dyslipidemia, coronary artery
 PT disease, diabetes, cancer or neurological disease, comprises sense
 PT sequence and antisense sequence which has specific modifications.
 XX
 XX Example 5; SEQ ID NO 6757; 378pp; English.
 PS
 XX

CC The invention describes a RNA interference (iRNA) agent (I) comprising a
 CC sense sequence and an antisense sequence, where the sense sequence have
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense
 CC sequences have one or more asymmetrical phosphorothioate modifications
 CC and the antisense sequence targets a human gene sequence. Also described
 CC are: a pharmaceutical preparation comprising (I); reducing (M1) apob-100
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);
 CC stabilising (I), involves selecting a sequence with activity and
 CC introducing one or more asymmetrical modification in the sequence, where
 CC the modification decreases nuclease sensitivity while not decreasing its
 CC activity; a kit comprising (I) and instruction for its use; and a device
 CC that can be dispense or administer a composition comprising (I). (I) is
 CC useful for reducing apob-100 levels or glucose-6-phosphatase levels. (M1)
 CC is useful for reducing apob-100 levels or glucose-6-phosphatase levels.
 CC The subject is suffering from a disorder characterised by elevated or
 CC otherwise unwanted expression of apob-100, elevated or otherwise unwanted
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
 CC inhibit hepatic glucose production or for treating glucose-metabolism-
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
 CC lung cancer), neurological disease (e.g., Huntington disease or
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
 CC represents a hepatitis C virus (HCV) antisense oligonucleotide that can
 CC be used to control HCV gene expression.

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 7.7e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 DB 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 828

ADR82256/c
 ID ADR82256 standard; DNA; 19 BP.
 XX
 AC ADR82256;
 XX
 DT 16-DEC-2004 (first entry)
 XX
 DE Hepatitis C virus (HCV) oligonucleotide seqid 6755.

XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
 KW cytosatic; anticonvulsant; nootropic; muscula; anti-HIV;
 KW RNA interference; iRNA; antisense technology; lipid metabolism;
 KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
 KW coronary artery disease; CAD; coronary heart disease; CHD;
 KW atherosclerosis; hepatic glucose production;
 KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
 KW colon cancer; lung cancer; neurological disease; Huntington disease;
 KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
 XX
 OS Hepatitis C virus.

PN WO2004080406-A2.

XX 23-SEP-2004.

XX 08-MAR-2004; 2004WO-US007070.

XX 07-MAR-2003; 2003US-0452682P.

XX 12-MAR-2003; 2003US-0454265P.

XX 13-MAR-2003; 2003US-0454962P.

XX 14-APR-2003; 2003US-0455050P.

XX 14-APR-2003; 2003US-0462894P.

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PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 09-MAY-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0469612P.
PR 11-AUG-2003; 2003US-0493986P.
PR 26-SEP-2003; 2003US-0494597P.
PR 09-OCT-2003; 2003US-0506341P.
PR 10-OCT-2003; 2003US-0510246P.
PR 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 6755; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a hepatitis C virus (HCV) antisense oligonucleotide that can
XX be used to control HCV gene expression.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 7.e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2727
XX |
XX Db 19 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 829
XX ID ADR82259/C
XX ID ADR82259 standard; DNA; 19 BP.
XX
XX AC ADR82259;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX XX Hepatitis C virus (HCV) oligonucleotide seqid 6758.
XX

```

```

KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytosatic; anticonvulsant; nootropic; muscular; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
XX
XX Hepatitis C virus.
XX
XX WO2004080406-A2.
XX
XX 23-SEP-2004.
XX
XX 08-MAR-2004; 2004WO-US007070.
XX
XX 07-MAR-2003; 2003US-0452682P.
XX 12-MAR-2003; 2003US-0454265P.
XX 13-MAR-2003; 2003US-0454962P.
XX 13-MAR-2003; 2003US-0455050P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX
XX (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 6758; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The
XX disorder is chosen from the HDL/LDL cholesterol imbalance,
XX dyslipidaemias, hypercholesterolaemia, coronary artery disease (CAD), coronary heart
XX disease (CHD) and atherosclerosis. (I) is administered to a subject to
XX inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
XX treating the diseases as mentioned above, cancer (e.g. breast, colon or
XX lung cancer), neurological disease (e.g., Huntington disease or
XX spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
XX represents a hepatitis C virus (HCV) antisense oligonucleotide that can
XX be used to control HCV gene expression.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 19; DB 1; Length 19;
XX Best Local Similarity 100.0%; Pred. No. 7.e+02;
XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2727
XX |
XX Db 19 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 829
XX ID ADR82259/C
XX ID ADR82259 standard; DNA; 19 BP.
XX
XX AC ADR82259;
XX
XX DT 16-DEC-2004 (first entry)
XX
XX XX Hepatitis C virus (HCV) oligonucleotide seqid 6758.
XX

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RESULT 833
ADT85246/C
ID   ADT85246 standard; DNA; 19 BP.
XX
XX
AC   ADT85246;
XX
XX
DT   13-JAN-2005 (first entry)
XX
XX
DE   Hepatitis C virus (HCV) inhibition associated DNA seqid 5288.
XX
XX
KW   antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW   interference RNA; iRNA; cholesterol moiety; apob; glucose-6-phosphatase;
KW   lipid metabolism; cholesterol imbalance; dyslipidaemia;
KW   familial combined hyperlipidaemia; acquired hyperlipidaemia;
KW   hypercholesterolaemia; statin-resistant hypercholesterolaemia;
KW   coronary artery disease; coronary heart disease; atherosclerosis;
KW   hepatic glucose production; glucose-metabolism-related disorder;
KW   type-2 diabetes; glitaxzone-resistant diabetes; HCV; hepatitis C virus;
KW   antisense inhibition; ss.
XX
XX
OS   Hepatitis C virus.
XX
XX
PN   WO2004091515-A2.
XX
XX
PD   28-OCT-2004.
XX
XX
PF   09-APR-2004; 2004WO-US011255.
XX
XX
PR   09-APR-2003; 2003US-0462097P.
PR   10-APR-2003; 2003US-0461915P.
PR   14-APR-2003; 2003US-0462894P.
PR   17-APR-2003; 2003US-0463772P.
PR   25-APR-2003; 2003US-0465665P.
PR   09-MAY-2003; 2003US-0465802P.
PR   08-AUG-2003; 2003US-0493986P.
PR   11-AUG-2003; 2003US-0494597P.
PR   26-SEP-2003; 2003US-0506341P.
PR   09-OCT-2003; 2003US-0510318P.
PR   10-OCT-2003; 2003US-0510318P.
PR   07-NOV-2003; 2003US-0518453P.
PR   08-MAR-2004; 2004WO-US007070.
PR   05-APR-2004; 2004WO-US010586.
XX
XX
PA   (ALNY-) ALNYLAM PHARM INC.
XX
XX
PI   Manoharan M, Elbashir S, Harborth J;
XX
XX
WPI; 2004-766693/75.
XX
XX
DR   New interference RNA agent comprising sense sequence and antisense
XX
XX
PT   sequence having cholesterol moieties, useful for reducing apob-100 levels
XX
XX
or glucose-6-phosphatase levels.
XX
XX
PS   Example 4; SEQ ID NO 5288; 324pp; English.
XX
XX
CC   The invention describes an interference RNA (iRNA) agent (I) comprising a
CC   sense sequence and an antisense sequence, where the sense sequence
CC   comprises one or more cholesterol moieties, and the antisense sequence
CC   targets a human gene sequence. The following are disclosed: a
CC   pharmaceutical composition comprising (I); and a device for administering
CC   (I) into a patient. (I) is useful for reducing apob-100 levels or glucose
CC   -6-phosphatase levels in a subject. (I) targets a sequence identical to
CC   any one of sequences as given in the specification. (I) comprises a
CC   cholesterol moiety. The cholesterol moiety is coupled to a sense strand.
CC   (I) further comprises a second cholesterol moiety. The second cholesterol
CC   moiety is coupled to a sense strand. (I) has 21 or more nucleotides. The
CC   duplex region of (I) is 19 nucleotides in length. The subject is
CC   suffering from a disorder having elevated or otherwise unwanted
CC   expression of apo-B-100, elevated or otherwise unwanted levels of
CC   cholesterol, and/or deregulation of lipid metabolism. The disorder is
CC   chosen from HDL/LDL cholesterol imbalance, dyslipidaemia (e.g., familial
CC   combined hyperlipidaemia or acquired hyperlipidaemia),

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CC   hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary
CC   artery disease, coronary heart disease and atherosclerosis, preferably
CC   statin-resistant hypercholesterolaemia. (I) is administered to a subject
CC   to inhibit hepatic glucose production or for treating glucose-metabolism-
CC   related disorders e.g., type-2 diabetes or glitaxzone-resistant diabetes.
CC   (I) has endonuclease or exonuclease resistance. This sequence represents
CC   a human hepatitis C virus polynucleotide associated with the inhibition
CC   of HCV in human liver cells.
XX
XX
SQ   Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

```

```

Query Match      0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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```

QY   2709 AAAAAAAAAAAAAAAAAAAAAA 2727
     |||||
Db    19 AAAAAAAAAAAAAAAAAAAAAA 1

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RESULT 834
ADT85245/C
ID   ADT85245 standard; DNA; 19 BP.
XX
XX
AC   ADT85245;
XX
XX
DT   13-JAN-2005 (first entry)
XX
XX
DE   Hepatitis C virus (HCV) inhibition associated DNA seqid 5287.
XX
XX
KW   antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW   interference RNA; iRNA; cholesterol moiety; apob; glucose-6-phosphatase;
KW   lipid metabolism; cholesterol imbalance; dyslipidaemia;
KW   familial combined hyperlipidaemia; acquired hyperlipidaemia;
KW   hypercholesterolaemia; statin-resistant hypercholesterolaemia;
KW   coronary artery disease; coronary heart disease; atherosclerosis;
KW   hepatic glucose production; glucose-metabolism-related disorder;
KW   type-2 diabetes; glitaxzone-resistant diabetes; HCV; hepatitis C virus;
KW   antisense inhibition; ss.
XX
XX
OS   Hepatitis C virus.
XX
XX
PN   WO2004091515-A2.
XX
XX
PD   28-OCT-2004.
XX
XX
PF   09-APR-2004; 2004WO-US011255.
XX
XX
PR   09-APR-2003; 2003US-0462097P.
PR   10-APR-2003; 2003US-0461915P.
PR   14-APR-2003; 2003US-0462894P.
PR   17-APR-2003; 2003US-0463772P.
PR   25-APR-2003; 2003US-0465665P.
PR   09-MAY-2003; 2003US-0465802P.
PR   08-AUG-2003; 2003US-0493986P.
PR   11-AUG-2003; 2003US-0494597P.
PR   26-SEP-2003; 2003US-0506341P.
PR   09-OCT-2003; 2003US-0510318P.
PR   10-OCT-2003; 2003US-0510318P.
PR   07-NOV-2003; 2003US-0518453P.
PR   08-MAR-2004; 2004WO-US007070.
PR   05-APR-2004; 2004WO-US010586.
XX
XX
PA   (ALNY-) ALNYLAM PHARM INC.
XX
XX
PI   Manoharan M, Elbashir S, Harborth J;
XX
XX
WPI; 2004-766693/75.
XX
XX
DR   New interference RNA agent comprising sense sequence and antisense
XX
XX
PT   sequence having cholesterol moieties, useful for reducing apob-100 levels
XX
XX
or glucose-6-phosphatase levels.

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XX Example 4; SEQ ID NO 5287; 324pp; English.
PS
CC The invention describes an interference RNA (iRNA) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequence
CC comprises one or more cholesterol moieties, and the antisense sequence
CC targets a human gene sequence. The following are disclosed: a
CC pharmaceutical composition comprising (I); and a device for administering
CC (I) into a patient. (I) is useful for reducing apoB-100 levels or glucose
CC -6-phosphatase levels in a subject. (I) targets a sequence identical to
CC any one of sequences as given in the specification. (I) comprises a
CC cholesterol moiety. The cholesterol moiety is coupled to a sense strand.
CC (I) further comprises a second cholesterol moiety. The second cholesterol
CC moiety is coupled to a sense strand. (I) has 21 or more nucleotides. The
CC duplex region of (I) is 19 nucleotides in length. The subject is
CC suffering from a disorder having elevated or otherwise unwanted levels of
CC expression of apo-B-100, elevated or otherwise unwanted levels of
CC cholesterol, and/or dysregulation of lipid metabolism. The disorder is
CC chosen from HDL/LDL cholesterol imbalance, dyslipidaemia (e.g., familial
CC combined hyperlipidaemia or acquired hyperlipidaemia),
CC hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary
CC artery disease, coronary heart disease and atherosclerosis, preferably
CC statin-resistant hypercholesterolaemia. (I) is administered to a subject
CC to inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorders e.g., type-2 diabetes or glitazone-resistant diabetes.
CC (I) has endonuclease or exonuclease resistance. This sequence represents
CC a human hepatitis C virus polynucleotide associated with the inhibition
CC of HCV in human liver cells.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db |||||
19 AAAAAAAAAAAAAAAAAA 1

RESULT 835
ADT85247/C
ID ADT85247 standard; DNA; 19 BP.
XX
AC ADT85247;
XX
XX
DT 13-JAN-2005 (first entry)
XX
DE Hepatitis C virus (HCV) inhibition associated DNA seqid 5289.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW interference RNA; iRNA; cholesterol moiety; apoB; glucose-6-phosphatase;
KW lipid metabolism; cholesterol imbalance; dyslipidaemia;
KW familial combined hyperlipidaemia; acquired hyperlipidaemia;
KW hypercholesterolaemia; statin-resistant hypercholesterolaemia;
KW coronary artery disease; coronary heart disease; atherosclerosis;
KW hepatic glucose production; glucose-metabolism-related disorder;
KW type-2 diabetes; glitazone-resistant diabetes; HCV; hepatitis C virus;
KW antisense inhibition; ss.
XX
OS Hepatitis C virus.
XX
PN WC2004091515-A2.
XX
XX
PD 28-OCT-2004.
XX
XX
PF 09-APR-2004; 2004WO-US011255.
XX
PR 09-APR-2003; 2003US-0462097P.
PR 10-APR-2003; 2003US-0461915P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.

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PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
PR 08-MAR-2004; 2004WO-US007070.
PR 05-APR-2004; 2004WO-US010586.
XX
XX (ALNY-) ALNYLAM PHARM INC.
XX
XX Manoharan M, Elbashir S, Harborth J;
XX WPI; 2004-766693/75.
XX
XX New interference RNA agent comprising sense sequence and antisense
XX sequence having cholesterol moieties, useful for reducing apoB-100 levels
XX or glucose-6-phosphatase levels.
XX
XX Example 4; SEQ ID NO 5289; 324pp; English.
XX
XX The invention describes an interference RNA (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequence
XX comprises one or more cholesterol moieties, and the antisense sequence
XX targets a human gene sequence. The following are disclosed: a
XX pharmaceutical composition comprising (I); and a device for administering
XX (I) into a patient. (I) is useful for reducing apoB-100 levels or glucose
XX -6-phosphatase levels in a subject. (I) targets a sequence identical to
XX any one of sequences as given in the specification. (I) comprises a
XX cholesterol moiety. The cholesterol moiety is coupled to a sense strand.
XX (I) further comprises a second cholesterol moiety. The second cholesterol
XX moiety is coupled to a sense strand. (I) has 21 or more nucleotides. The
XX duplex region of (I) is 19 nucleotides in length. The subject is
XX suffering from a disorder having elevated or otherwise unwanted levels of
XX expression of apo-B-100, elevated or otherwise unwanted levels of
XX cholesterol, and/or dysregulation of lipid metabolism. The disorder is
XX chosen from HDL/LDL cholesterol imbalance, dyslipidaemia (e.g., familial
XX combined hyperlipidaemia or acquired hyperlipidaemia),
XX hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary
XX artery disease, coronary heart disease and atherosclerosis, preferably
XX statin-resistant hypercholesterolaemia. (I) is administered to a subject
XX to inhibit hepatic glucose production or for treating glucose-metabolism-
XX related disorders e.g., type-2 diabetes or glitazone-resistant diabetes.
XX (I) has endonuclease or exonuclease resistance. This sequence represents
XX a human hepatitis C virus polynucleotide associated with the inhibition
XX of HCV in human liver cells.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;
Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db |||||
19 AAAAAAAAAAAAAAAAAA 1

RESULT 836
AEB28528/C
ID AEB28528 standard; DNA; 19 BP.
XX
XX
AC AEB28528;
XX
XX
DT 22-SEP-2005 (first entry)
XX
DE Antisense oligonucleotide with modified linkages, seq id 3.
XX
KW Antisense oligonucleotide; gene therapy; protected oligonucleotide;
KW diagnostic; therapeutic; prodrug activation; ss.
XX

```

OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1. .19
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2-(pivaloylthio)ethyl phosphotriester
FT internucleotide linkages between nucleotides 1-2,2-3,3-
FT 4,16-17,17-18,18-19 OR 2-(pivaloylthio)ethyl
FT phosphotriester internucleotide linkages between 1-2,2-3,3
FT -4,4-5,15-16,16-17,17-18,18-19 where nucleotides 1-4 and
FT 15-18 are 2'-O-(2-methoxyethyl)thymidines"
XX
PN US6919437-B1.
XX
PD 19-JUL-2005.
XX
XX
XX 10-JUN-1999; 99US-00329416.
XX
XX 11-JUN-1998; 98US-00095822.
XX
XX (ISIS-) ISIS PHARM INC.
XX Manoharan M, Guzaev A;
XX
XX WPI; 2005-519331/53.
DR
XX
XX New nucleoside/oligonucleotides modified at 2' position by linker-bound
PT support including nucleosides containing bioreversible phosphate blocking
PT linkages, useful as diagnostic, therapeutic and research reagents.
PT
XX
XX Example 2; SEQ ID NO 3; 20pp; English.
PS
XX
XX The invention relates to nucleosides/oligonucleotides (I) modified at 2'
CC position by linker-bound support including nucleosides containing
CC bioreversible phosphate blocking linkages. (I) are useful in diagnostics,
CC therapeutics and as research reagents and kits. The method is useful in
CC the preparation of antisense oligonucleotides that can be directed
CC against a target messenger RNA sequence or alternatively against a target
CC DNA sequence, or hybridize to the nucleic acid to which they are
CC complementary. They are useful for treating organisms having a disease
CC characterized by the undesired production of a protein. (I) have enhanced
CC chemical and biophysical properties for cellular membrane penetration
CC i.e. they are capable of improving cellular lipid bilayers penetrating
CC potential as well as resistance to exonuclease and endonuclease
CC degradation in vivo. (I) mitigate potential problems such as very short
CC biological half-lives due to degradation by nucleases, inherent negative
CC charge and hydrophilic nature associated with the therapeutic use of
CC oligonucleotides of natural composition. The bioreversible protecting
CC groups lend nuclease resistance to the oligonucleotides and are removed
CC in a cell, in the cell cytosol or in vitro in cytosol extract by
CC endogenous enzymes. The current sequence represents an antisense
CC oligonucleotide that illustrates the method of the invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
D6 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 837
AEC90953
ID AEC90953 standard; RNA; 19 BP.
XX
AC AEC90953;
XX
DT 17-NOV-2005 (first entry)
XX

DE STAT-3 siRNA antisense strand, SEQ ID 551.
XX
XX Signal-transducer and activator of transcription-3; RNA interference;
KW gene silencing; cytostatic; antiproliferative; dermatological;
KW antiinflammatory; gastrointestinal-Gen.; cancer; inflammation; psoriasis;
KW eczema; dermatitis; Crohns disease; inflammatory bowel disease; siRNA;
KW short interfering RNA; ss.
XX
XX Synthetic.
OS
PN US2005196781-A1.
XX
XX 08-SEP-2005.
XX
XX 15-DEC-2004; 2004US-00014373.
PF
XX 18-MAY-2001; 2001US-0292217P.
PR 20-JUL-2001; 2001US-0306883P.
PR 13-AUG-2001; 2001US-0311865P.
PR 20-FEB-2002; 2002US-0358580P.
PR 06-MAR-2002; 2002US-0362018P.
PR 11-MAR-2002; 2002US-0363124P.
PR 17-MAY-2002; 2002US-00151116.
PR 06-JUN-2002; 2002WO-US015876.
PR 22-JUL-2002; 2002US-00201394.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-040129P.
PR 20-FEB-2003; 2003WO-US005028.
PR 20-FEB-2003; 2003WO-US005346.
PR 30-APR-2003; 2003US-00427160.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.
PR 10-FEB-2004; 2004US-0543480P.
PR 13-FEB-2004; 2004US-00780447.
PR 16-APR-2004; 2004US-00826966.
PR 30-APR-2004; 2004WO-US013456.
PR 24-MAY-2004; 2004WO-US016390.
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Robin H, Mcswiggen J;
PI
XX WPI; 2005-604649/62.
XX
XX Novel chemically synthesized double stranded short interfering nucleic
FT acid molecule that directs cleavage of STAT3 RNA through RNA
FT interference, useful for treating cancer and inflammatory diseases e.g.
PT psoriasis in subject or organism.
XX
XX Example 3; SEQ ID NO 551; 266pp; English.
PS
XX
XX The invention relates to a novel chemically synthesized double stranded
CC short interfering nucleic acid molecule that directs cleavage of a signal
CC transducer and activator of transcription 3 (STAT3) RNA by RNA
CC interference. The invention further includes a composition comprising the
CC short interfering nucleic acid in a carrier or diluent. The short
CC interfering nucleic acid has cytostatic, antiproliferative, dermatological,
CC antiinflammatory, and gastrointestinal-Gen. activities. The short
CC interfering nucleic acid or its composition is useful for treating,
CC preventing, inhibiting, or reducing cancer, proliferative, and/or
CC inflammatory diseases, disorders, or conditions in a subject or organism,
CC such as psoriasis, eczema, dermatitis, Crohn's disease, and inflammatory
CC bowel disease, and for any other disease, trait, or condition that is
CC related to or will respond to the levels of STAT3 in a cell or tissue,
CC alone or in combination with other treatments or therapies. This oligo
CC sequence represents a STAT-3 siRNA strand of the invention.
XX


```

SQ Sequence 19 BP; 19 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match      0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 1 AAAAAAAAAAAAAAAAAAAAAA 19

RESULT 838
AEC90676/c
ID AEC90676 standard; RNA; 19 BP.
XX
AC AEC90676;
XX
DT 17-NOV-2005 (first entry)
XX
DE STAT-3 siRNA target/sense strand, SEQ ID 274.
XX
KW Signal-transducer and activator of transcription-3; RNA interference;
KW gene silencing; cytostatic; antiproliferative; dermatological;
KW anti-inflammatory; gastrointestinal-gen.; cancer; inflammation; psoriasis;
KW eczema; dermatitis; Crohn's disease; inflammatory bowel disease; siRNA;
KW short interfering RNA; ss.
XX
OS Synthetic.
XX
PN US2005196781-A1.
XX
PD 08-SEP-2005.
XX
PF 15-DEC-2004; 2004US-00014373.
XX
PR 18-MAY-2001; 2001US-0292217P.
PR 20-JUL-2001; 2001US-0306883P.
PR 13-AUG-2001; 2001US-0311865P.
PR 20-FEB-2002; 2002US-0358580P.
PR 06-MAR-2002; 2002US-0362016P.
PR 11-MAR-2002; 2002US-0363124P.
PR 17-MAY-2002; 2002US-00151116.
PR 06-JUN-2002; 2002US-0015876P.
PR 22-JUL-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-00201394.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409233P.
PR 15-JAN-2003; 2003US-0440129P.
PR 20-FEB-2003; 2003WO-US005028.
PR 30-APR-2003; 2003WO-US005346.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.
PR 10-FEB-2004; 2004US-0543480P.
PR 13-FEB-2004; 2004US-00780447.
PR 16-APR-2004; 2004US-00826966.
PR 30-APR-2004; 2004WO-US013456.
PR 24-MAY-2004; 2004WO-US016390.
XX
PA (SIRN-) SIRNA THERAPEUTICS INC.
XX
PI Robin H, Mcswiggen J;
XX
DR WPI; 2005-604649/62.
XX
PT Novel chemically synthesized double stranded short interfering nucleic
PT acid molecule that directs cleavage of STAT3 RNA through RNA
PT interference, useful for treating cancer and inflammatory diseases e.g.
PT psoriasis in subject or organism.

```

```

XX PS Example 3; SEQ ID NO 274; 266pp; English.
XX CC The invention relates to a novel chemically synthesized double stranded
XX CC short interfering nucleic acid molecule that directs cleavage of a signal
XX CC transducer and activator of transcription 3 (STAT3) RNA by RNA
XX CC interference. The invention further includes a composition comprising the
XX CC short interfering nucleic acid in a carrier or diluent. The short
XX CC interfering nucleic acid has cytostatic, antiproliferative, dermatological,
XX CC anti-inflammatory, and gastrointestinal-gen. activities. The short
XX CC interfering nucleic acid or its composition is useful for treating,
XX CC preventing, inhibiting, or reducing cancer, proliferative, and/or
XX CC inflammatory diseases, disorders, or conditions in a subject or organism,
XX CC such as psoriasis, eczema, dermatitis, Crohn's disease, and inflammatory
XX CC bowel disease, and for any other disease, trait, or condition that is
XX CC related to or will respond to the levels of STAT3 in a cell or tissue,
XX CC alone or in combination with other treatments or therapies. This oligo
XX CC sequence represents a STAT-3 siRNA strand of the invention.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 0 T; 19 U; 0 Other;

Query Match      0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 839
AEC76001
ID AEC76001 standard; RNA; 19 BP.
XX
AC AEC76001;
XX
DT 06-APR-2006 (first entry)
XX
DE Human NOGO receptor target sequence/siRNA sense strand, SEQ:551.
XX
KW RNA interference; gene silencing; short interfering RNA; siRNA;
KW nervous system injury; spinal cord injury; neuroprotective; vulnery;
KW cerebrovascular ischemia; cerebroprotective; multiple sclerosis;
KW muscular dystrophy; muscular-gen.; neuropathy; motor neuron disease;
KW Huntington's chorea; Parkinson's disease; antiparkinsonian;
KW Creutzfeldt Jakob disease; anticonvulsant; neotropic; dementia;
KW reticulon 4 receptor; Alzheimer's disease; NOGO receptor;
XX OS Homo sapiens.
XX US2005261212-A1.
XX
PN 24-NOV-2005.
XX
PD 26-JUL-2002; 2002US-00206693.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 03-FEB-2001; 2001US-00780533.
PR 05-APR-2001; 2001US-00827395.
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 03-APR-2002; 2002WO-US010512.
PR 06-JUN-2002; 2002US-0386782P.
XX
PA (MCSW/) MCSWIGGEN J A.
XX
PI Mcswiggen JA;
XX
DR WPI; 2006-190836/20.
XX
PT New chemically modified double stranded short interfering nucleic acid
PT (siRNA) molecule that directs cleavage of a NOGO receptor (NOGOR) RNA via

```

PT RNA interference (RNAi), useful for modulating gene expression.
XX Disclosure; SEQ ID NO 551; 171pp; English.
PS The invention relates to chemically synthesized short interfering nucleic
XX acids (siRNAs) which downregulate expression of a NOGO receptor gene by
CC RNA interference. The siRNAs may or may not comprise ribonucleotides, can
CC contain deoxyribonucleotides, can be chemically modified and may be
CC double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siRNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The invention also relates to pharmaceutical
CC compositions comprising an siRNA targeted to a NOGO receptor mRNA. It
CC further discloses siRNAs targeted to a NOGO receptor gene, siRNAs targeted
CC to a NOGO gene itself, and expression vectors and host cells comprising
CC an siRNA of the invention. In particular, the invention discloses siRNAs
CC (AEF75903-AEF76100 and AEF76101-AEF76112) targeted to the human NOGO
CC receptor gene of GenBank accession number BC011787, and siRNAs (AEF75451-
CC AEF75902) targeted to the human NOGO-A (K1AA0886) gene of DDBJ accession
CC number AB020693. The siRNAs are used to modulate expression of NOGO
CC receptor or NOGO genes in cells, tissue explants or organisms (e.g., by
CC ex vivo gene therapy), or in grafts and transplants for the treatment of
CC a variety of neurodegenerative conditions such as central nervous system
CC (CNS) injury (e.g., spinal cord injury or stroke), multiple sclerosis
CC (MS), muscular dystrophy, chemotherapy-induced neuropathy, amyotrophic
CC lateral sclerosis (ALS), ataxia, Parkinson's disease, Huntington's
CC disease, dementia, Creutzfeldt-Jakob disease and especially Alzheimer's
CC disease. The siRNAs may also be used in drug screening, diagnosis,
CC therapeutic target identification and validation, genetic engineering,
CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
CC single nucleotide polymorphisms). The present sequence represents the
CC sense strand of a human NOGO receptor-targeted double-stranded siRNA,
CC which is identical to the NOGO receptor transcript target sequence.
XX
SQ Sequence 19 BP; 18 A; 0 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 7.7e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
DB 1 UAAAAAAAAAAAAAAAAAAAAA 19

RESULT 840
AEF76100/c
ID AEF76100 standard; RNA; 19 BP.
XX AEF76100;
XX
XX
XX 06-APR-2006 (first entry)
XX Human NOGO receptor siRNA antisense strand, SEQ:650.
XX
XX RNA interference; gene silencing; short interfering RNA; siRNA;
KW nervous system injury; spinal cord injury; neuroprotective; vulnary;
KW cerebrovascular ischemia; cerebroprotective; multiple sclerosis;
KW muscular dystrophy; muscular-gen.; neuropathy; motor neurone disease;
KW CNS-gen.; ataxia; Parkinsons disease; antiparkinsonian;
KW Huntingtons chorea; anticonvulsant; nootropic; dementia;
KW Creutzfeldt Jakob disease; Alzheimers disease; NOGO receptor;
KW reticulon 4 receptor; RTN4R; ss.
XX
XX Homo sapiens.
XX
XX US2005261212-A1.
XX
XX 24-NOV-2005.
XX
XX 26-JUL-2002; 2002US-00206693.
XX

PR 11-FEB-2000; 2000US-0181797P.
PR 09-FEB-2001; 2001US-00780533.
PR 05-APR-2001; 2001US-00927395.
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 03-APR-2002; 2002WO-US010512.
PR 06-JUN-2002; 2002US-0386782P.
XX
XX (MCSW/) MCSWIGGEN J A.
PA Mcswiggen JA;
PI WPI; 2006-190836/20.
DR
XX New chemically modified double stranded short interfering nucleic acid
PT (siRNA) molecule that directs cleavage of a NOGO receptor (NOGOR) RNA via
PT RNA interference (RNAi), useful for modulating gene expression.
XX Disclosure; SEQ ID NO 650; 171pp; English.
XX The invention relates to chemically synthesized short interfering nucleic
CC acids (siRNAs) which downregulate expression of a NOGO receptor gene by
CC RNA interference. The siRNAs may or may not comprise ribonucleotides, can
CC contain deoxyribonucleotides, can be chemically modified and may be
CC double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siRNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The invention also relates to pharmaceutical
CC compositions comprising an siRNA targeted to a NOGO receptor mRNA. It
CC further discloses siRNAs targeted to a NOGO receptor gene, siRNAs comprising
CC to a NOGO gene itself, and expression vectors and host cells comprising
CC an siRNA of the invention. In particular, the invention discloses siRNAs
CC (AEF75903-AEF76100 and AEF76101-AEF76112) targeted to the human NOGO
CC receptor gene of GenBank accession number BC011787, and siRNAs (AEF75451-
CC AEF75902) targeted to the human NOGO-A (K1AA0886) gene of DDBJ accession
CC number AB020693. The siRNAs are used to modulate expression of NOGO
CC receptor or NOGO genes in cells, tissue explants or organisms (e.g., by
CC ex vivo gene therapy), or in grafts and transplants for the treatment of
CC a variety of neurodegenerative conditions such as central nervous system
CC (CNS) injury (e.g., spinal cord injury or stroke), multiple sclerosis
CC (MS), muscular dystrophy, chemotherapy-induced neuropathy, amyotrophic
CC lateral sclerosis (ALS), ataxia, Parkinson's disease, Huntington's
CC disease, dementia, Creutzfeldt-Jakob disease and especially Alzheimer's
CC disease. The siRNAs may also be used in drug screening, diagnosis,
CC therapeutic target identification and validation, genetic engineering,
CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
CC single nucleotide polymorphisms). The present sequence represents the
CC antisense strand of a human NOGO receptor-targeted double-stranded siRNA.
XX
SQ Sequence 19 BP; 1 A; 0 C; 0 G; 0 T; 18 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.7e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
DB 19 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 841
AAQ49436/c
ID AAQ49436 standard; cDNA; 20 BP.
XX AAQ49436;
XX
XX 25-MAR-2003 (revised)
DT 27-APR-1994 (first entry)
XX
XX Cytochrome P450 sequence amplification PCR primer polyT.
XX Transgenic plants; altered petal colour; polymerase chain reaction; ss.

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XX OS Synthetic.
XX PN WO9320206-A1.
XX XX 14-OCT-1993.
XX PD
XX PF 25-MAR-1993; 93WO-AU000127.
XX PR 27-MAR-1992; 92AU-00001538.
XX PR 07-JAN-1993; 93AU-00006698.
XX XX (ITFL-) INT FLOWER DEV PTY LTD.
XX PA
XX PI Holton TA, Cornish EC, Tanaka Y;
XX DR WPI; 1993-336914/42.
XX XX Nucleic acid isolate encoding flavonoid-3'-hydroxylase - is used to
XX PT create transgenic plants with altered petal colour.
XX PT
XX PS Disclosure; Page 25; 86pp; English.
XX XX
XX CC The sequence is that of a PCR primer which was used in polymerase chain
XX CC reactions for the amplification of cloned cytochrome P450 sequences.
XX CC (Updated on 25-MAR-2003 to correct PN field.)
XX CC
XX SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAACAAAAA 2725
DB 19 CTAACAAAAA 1

RESULT 842
AAQ75575/c
ID AAQ75575 standard; DNA; 20 BP.
AC AAQ75575;
XX
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX OS
XX PN JP06303997-A.
XX XX
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX XX
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XX
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX XX
XX PS Disclosure; Page 5; 11pp; Japanese.
XX XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX XX
XX SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAACAAAAA 2725
DB 19 CTAACAAAAA 1

RESULT 844
AAQ75576/c
ID AAQ75576 standard; DNA; 20 BP.
XX

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CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX XX
XX SQ Sequence 20 BP; 1 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2707 CTAACAAAAA 2725
DB 19 CTAACAAAAA 1

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RESULT 843
AAQ75578/c
ID AAQ75578 standard; DNA; 20 BP.
XX AC AAQ75578;
XX XX
XX DT 04-AUG-1995 (first entry)
XX XX Reverse transcription primer used in cDNA analysis technique.
XX DE Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX XX Synthetic.
XX OS
XX PN JP06303997-A.
XX XX
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX XX
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XX
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX XX
XX PS Disclosure; Page 5; 11pp; Japanese.
XX XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX XX
XX SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2707 CTAACAAAAA 2725
DB 19 CTAACAAAAA 1

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RESULT 844
AAQ75576/c
ID AAQ75576 standard; DNA; 20 BP.
XX

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CC polymorphisms (SNP) identification probe and determining the SNP score.
 CC The methods can be used for analysing target nucleic acid sequences,
 CC especially genomic DNA sequences, to determine if they contain SNPs or
 CC short tandem repeats (STRs). The methods can be used to detect SNPs for
 CC use in population genetics, drug development, forensics, cancer, genetic
 CC disease research, genomic analysis, diagnostics and therapeutics in
 CC humans, plants and animals
 CC
 CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
 XX Sequence 20 BP; 19 A; 0 C; 0 G; 0 T; 0 U; 1 Other;
 SQ
 Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 1 AAAAAAAAAAAAAAAAAAAAAA 20
 |||||
 RESULT 846
 AAS05715/C
 ID AAS05715 standard; DNA; 20 BP.
 XX
 AC AAS05715;
 XX
 DT 09-SEP-2004 (revised)
 DT 07-SEP-2001 (first entry)
 XX
 XX 8-aminopurine substituted region of an RP-TFO.
 XX
 KW reverse phase triplex forming oligonucleotide; RP-TFO;
 KW protected nucleic acid sequence; PNAS; single nucleotide polymorphism;
 KW SNP; short tandem repeat; cancer; Factor V Leiden SNP; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 17
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Other= Hypoxanthine or Inosine"
 XX
 PN WO200132929-A1.
 XX
 XX 10-MAY-2001.
 XX
 PF 03-NOV-2000; 2000WO-US030534.
 XX
 PR 03-NOV-1999; 99US-0163356P.
 PR 03-NOV-1999; 99US-0163416P.
 PR 21-DEC-1999; 99US-0171348P.
 PR 07-JUL-2000; 2000US-0216579P.
 XX
 XX (CYGE-) CYGENE INC.
 PA (OSTE/) OSTE C C.
 XX
 XX Oste CC, Ramberg ER;
 XX
 XX WPI; 2001-343488/36.
 XX
 XX Analyzing target nucleic acid sequences, useful for population genetics,
 PT drug development and diagnosing cancer, comprises hybridizing triple
 PT forming oligonucleotide and probe to target sequence.
 XX
 PS Example 2; Page 66; 141pp; English.
 XX
 CC The sequence is a second reverse phase triplex forming oligonucleotide,
 CC RP-TFO (3' to the SNP) used to analyse Factor V Leiden SNP using the
 CC method of the invention. The invention relates to analysing target
 CC nucleic acid sequences comprising restricting isolated DNA, hybridising
 CC at least one triplex forming oligonucleotide (TFO), adding a 3' to 5'

CC exonuclease to form a protected nucleic acid sequence (PNAS) tail
 CC structure, hybridising the captured structure with a single nucleotide
 CC polymorphisms (SNP) identification probe and determining the SNP score.
 CC The methods can be used for analysing target nucleic acid sequences, or
 CC especially genomic DNA sequences, to determine if they contain SNPs or
 CC short tandem repeats (STRs). The methods can be used to detect SNPs for
 CC use in population genetics, drug development, forensics, cancer, genetic
 CC disease research, genomic analysis, diagnostics and therapeutics in
 CC humans, plants and animals
 CC
 CC Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
 XX Sequence 20 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 1 Other;
 SQ
 Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1
 |||||
 RESULT 847
 ABZ88266
 ID ABZ88266 standard; DNA; 20 BP.
 XX
 AC ABZ88266;
 XX
 DT 17-OCT-2003 (first entry)
 DT
 XX Human oligonucleotide sequence.
 DE
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO200285308-A2.
 XX
 XX 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasegra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 PI
 XX WPI; 2003-329219/22.
 XX
 XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Disclosure; SEQ ID NO 3508; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction.
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 20 BP; 17 A; 1 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAAAAAAAAAAAAAAAAAAA 2725
 |||||
 DB 2 CTAAAAAAAAAAAAAAAAAAAA 20

RESULT 848
 ABZ89546
 ID ABZ89546 standard; DNA; 20 BP.
 XX
 AC ABZ89546;
 XX
 XX 17-OCT-2003 (first entry)
 DT
 XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.
 OS
 XX WO200285308-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013135.
 PF
 XX 24-APR-2001; 2001US-0286137P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 4788; 872bp; English.
 XX
 XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction.
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 20 BP; 18 A; 0 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
 |||||
 DB 2 TAAAAAAAAAAAAAAAAAAAAA 20

RESULT 849
 ABZ99050/c
 ID ABZ99050 standard; DNA; 20 BP.
 XX
 AC ABZ99050;
 XX
 XX 17-OCT-2003 (first entry)
 DT
 XX Human PDE4C oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.
 OS
 XX WO200285308-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013135.
 PF
 XX 24-APR-2001; 2001US-0286137P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 14292; 872bp; English.
 XX
 XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 850
 ABZ88618
 ID ABZ88618 standard; DNA; 20 BP.
 XX
 AC ABZ88618;

DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX

OS Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX

XX Disclosure; SEQ ID NO 3860; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 19 A; 1 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 2 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 851
 ABZ89678
 ID ABZ89678 standard; DNA; 20 BP.
 XX
 AC ABZ89678;

DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytosstatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX

OS Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX

XX Disclosure; SEQ ID NO 4920; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 20 BP; 19 A; 0 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
|||||||
Db 1 AAAAAAAAAAAAAAAAAAAAAA 20

RESULT 852

ABZ87681/C

ID ABZ87681 standard; DNA; 20 BP.

XX AC ABZ87681;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

XX antisense gene therapy; respiratory; lung; adenosine sensitivity;

XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired

XX respiration, has oligo(s) antisense to specific gene(s) or its

XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

XX ubiquinone.

XX Disclosure; SEQ ID NO 2923; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

XX first active agent comprising an oligonucleotide antisense to the

XX initiation codon, coding region, 5' or 3' end genomic flanking regions,

XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

XX junctions of genes encoding a polypeptide associated with lung and/or

XX nasal airway dysfunction and a second active agent comprising an

XX antiinflammatory steroid and ubiquinone. A composition of the invention

XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

XX immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
|||||||
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 853

ABZ89677

ID ABZ89677 standard; DNA; 20 BP.

XX AC ABZ89677;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

XX antisense gene therapy; respiratory; lung; adenosine sensitivity;

XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired

XX respiration, has oligo(s) antisense to specific gene(s) or its

XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

XX ubiquinone.

XX Disclosure; SEQ ID NO 4919; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a

XX first active agent comprising an oligonucleotide antisense to the

XX initiation codon, coding region, 5' or 3' end genomic flanking regions,

XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

XX junctions of genes encoding a polypeptide associated with lung and/or

XX nasal airway dysfunction and a second active agent comprising an

XX antiinflammatory steroid and ubiquinone. A composition of the invention

XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

XX immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 19 A; 0 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2728
 Db 1 AAAAAAAAAAAAAAAAAA 20

RESULT 854
 ABD24848
 ID ABD24848 standard; DNA; 20 BP.
 AC ABD24848;
 XX
 XX 29-JUL-2004 (first entry)
 DT
 DE A1092623-derived oligonucleotide SEQ ID 3860.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cystostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 XX WO200285309-A2.
 XX
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 XX WPI; 2003-093058/08.
 DR
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 3860; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal.
 CC Oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung

CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 19 A; 1 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2727
 Db 2 AAAAAAAAAAAAAAAAAA 20

RESULT 855
 ABD32081/c
 ID ABD32081 standard; DNA; 20 BP.
 XX
 AC ABD32081;
 XX
 XX 29-JUL-2004 (first entry)
 DT
 DE Human PDE4C-derived oligonucleotide SEQ ID 14292.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cystostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX
 XX WO200285309-A2.
 XX
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013143.
 PF
 XX 24-APR-2001; 2001US-0286036P.
 PR
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 XX WPI; 2003-093058/08.
 DR
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to

PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.

XX Claim 15; SEQ ID NO 14292; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it

XX Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

SQ

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
|||||
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 856
ABD25776
ID ABD25776 standard; DNA; 20 BP.

XX
AC ABD25776;
XX
DT 29-JUL-2004 (first entry)
XX
DE A1085559 DNA fragment.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.

XX Homo sapiens.

OS
XX
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.
PR (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.

DR Pharmaceutical composition for treating asthma, has antisense
XX oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.

XX Claim 15; SEQ ID NO 4788; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it

XX Sequence 20 BP; 18 A; 0 C; 0 G; 2 T; 0 U; 0 Other;

SQ

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
|||||
Db 2 TAAAAAAAAAAAAAAAAAAAAA 20

RESULT 857
ABD24496
ID ABD24496 standard; DNA; 20 BP.

XX
AC ABD24496;
XX
DT 29-JUL-2004 (first entry)
XX
XX A1652901-derived oligonucleotide SEQ ID 3508.

DE Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW

KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

OS Homo sapiens.

PN WO200285309-A2.

XX 31-OCT-2002.

PD 23-APR-2002; 2002WO-US013143.

PF 24-APR-2001; 2001US-0286036P.

PR (EPIC-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

DR WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 3508; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytoskeletal activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX Sequence 20 BP; 17 A; 1 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2725

Db 2 CTAATAAAAAAAAAAAAAA 20

RESULT 850

ABD23911/c

ID

ABD23911 standard; DNA; 20 BP.

XX

ABD23911;

XX

29-JUL-2004 (first entry)

DT

XX

DE

Human calmodulin 2-derived oligonucleotide SEQ ID 2923.

XX

XX

KW

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Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 859
 ADJ60935/c
 ID ADJ60935 standard; DNA; 20 BP.
 XX
 AC ADJ60935;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Oligonucleotide associated to PDE4C #1.
 XX
 KW interleukin; IL-4 receptor; IL-5 receptor; lung disease;
 KW airway inflammation; allergy; asthma; impeded respiration;
 KW cystic fibrosis; acute respiratory distress syndrome;
 KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
 KW ss.
 XX
 OS Homo sapiens.
 XX
 PN WO2004011613-A2.
 XX
 PD 05-FEB-2004.
 XX
 XX 25-JUL-2003; 2003WO-US023509.
 XX
 PR 29-JUL-2002; 2002US-0399076P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 PA
 XX NYCE JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
 PI Shahabuddin S, Lu H, Cong H;
 DR WPI; 2004-203534/19.
 XX
 XX Novel single or multiple target oligonucleotide anti-sense to e.g.
 PT Initiation codons and introns of respiratory disease-relevant genes e.g.,
 PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
 PT disease e.g., asthma.
 XX
 PS Claim 2; SEQ ID NO 1791; 85pp; English.
 XX
 CC The present invention relates to an oligonucleotide anti-sense to e.g.,
 CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
 CC end of nucleic acid target comprising gene(s) chosen from e.g.
 CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
 CC oligonucleotide and optionally surfactant operatively linked to the
 CC oligonucleotide. The method is useful for preventing or treating a
 CC respiratory or lung disease, which involves administering to the airways
 CC of a subject an effective amount of an inhibitor. The oligonucleotide is
 CC useful for production of a medicament for the prevention and/or treatment
 CC of a respiratory or lung disease. The respiratory or lung disease is
 CC chosen from airway inflammation, allergy(ies), asthma, impeded
 CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
 CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
 CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
 CC obstruction. The present sequence represents an oligonucleotide of the
 CC invention.

QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 861
 ADK74188/c
 ID ADK74188 standard; DNA; 20 BP.
 XX
 AC ADK74188;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 860
 ADK74647/c
 ID ADK74647 standard; DNA; 20 BP.
 XX
 AC ADK74647;
 XX
 DT 20-MAY-2004 (first entry)
 XX
 DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1981.
 XX
 KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-harpetic neuralgia;
 KW diabetic neuropathy; arthritic pain; migraine headache;
 KW infantile epilepsy; ataxia; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004016754-A2.
 XX
 PD 26-FEB-2004.
 XX
 PF 14-AUG-2003; 2003WO-US025465.
 XX
 PR 14-AUG-2002; 2002US-0403416P.
 XX
 PA (PHAA) PHARMACIA CORP.
 XX
 PI Roberts SL;
 XX
 DR WPI; 2004-203785/19.
 XX
 XX New antisense compound targeted to a nucleic acid molecule encoding
 PT Nav1.3, useful for treating a disease or condition associated
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
 PT disorder, or ataxia.
 XX
 PS Claim 4; SEQ ID NO 1981; 417pp; English.
 XX
 CC The present invention relates to an antisense compound targeted to a
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The
 CC compound and composition are useful for treating a disease or condition
 CC associated with Nav1.3, e.g. pain including but not limited to
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate
 CC headache; seizure disorder such as childhood seizure disorder, including
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
 CC sequence represents a chimeric phosphorothioate oligonucleotide with
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
 CC human Nav1.3 expression, the oligonucleotides are designed to target
 CC different regions of the human Nav1.3 RNA.

QY 2709 AAAAAAAAAAAAAAAAAA 2727
 DB 19 AAAAAAAAAAAAAAAAAA 1

RESULT 861
 ADK74188/c
 ID ADK74188 standard; DNA; 20 BP.
 XX
 AC ADK74188;

Query Match 0.7%; Score 19; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
XX DT 20-MAY-2004 (first entry)
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1522.
XX KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX KW diabetic neuropathy; arthritic pain; migraine headache;
XX KW infantile epilepsy; ataxia; ss.
XX OS Synthetic.
XX OS WO2004016754-A2.
XX PN 26-FEB-2004.
XX PD 14-AUG-2003; 2003WO-US025465.
XX PF 14-AUG-2002; 2002US-0403416P.
XX PR (PHAA ) PHARMACIA CORP.
XX PA Roberds SL;
XX PI WPI; 2004-203785/19.
XX DR New antiseense compound targeted to a nucleic acid molecule encoding
XX PF Nav1.3, useful for treating a disease or condition associated
XX KW with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX PT disorder, or ataxia.
XX PS Claim 4; SEQ ID NO 1522; 417pp; English.
XX CC The present invention relates to an antiseense compound targeted to a
XX CC nucleic acid molecule encoding Nav1.3, where the antiseense compound
XX CC specifically hybridizes with and inhibits the expression of Nav1.3. The
XX CC compound and composition are useful for treating a disease or condition
XX CC associated with Nav1.3, e.g. pain including but not limited to
XX CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX CC pain from burns, migraine headache, cluster headache, mild-to-moderate
XX CC headache; seizure disorder such as childhood seizure disorder, including
XX CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX CC sequence represents a chimeric phosphorothioate oligonucleotide with
XX CC 2'MOE wings and a deoxy gap. Used during the antiseense inhibition of
XX CC human Nav1.3 expression, the oligonucleotides are designed to target
XX CC different regions of the human Nav1.3 RNA.
XX SQ Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 862
ADK74414/C
ID ADK74414 standard; DNA; 20 BP.
XX AC ADK74414;
XX DT 20-MAY-2004 (first entry)
XX DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1748.
XX KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
XX KW diabetic neuropathy; arthritic pain; migraine headache;
XX KW infantile epilepsy; ataxia; ss.
XX OS Synthetic.
```

```
XX WO2004016754-A2.
XX 26-FEB-2004.
XX 14-AUG-2003; 2003WO-US025465.
XX 14-AUG-2002; 2002US-0403416P.
XX (PHAA ) PHARMACIA CORP.
XX Roberds SL;
XX WPI; 2004-203785/19.
XX New antiseense compound targeted to a nucleic acid molecule encoding
XX with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX disorder, or ataxia.
XX Claim 4; SEQ ID NO 1748; 417pp; English.
XX The present invention relates to an antiseense compound targeted to a
XX nucleic acid molecule encoding Nav1.3, where the antiseense compound
XX specifically hybridizes with and inhibits the expression of Nav1.3. The
XX compound and composition are useful for treating a disease or condition
XX associated with Nav1.3, e.g. pain including but not limited to
XX neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX pain from burns, migraine headache, cluster headache, mild-to-moderate
XX headache; seizure disorder such as childhood seizure disorder, including
XX but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX sequence represents a chimeric phosphorothioate oligonucleotide with
XX 2'MOE wings and a deoxy gap. Used during the antiseense inhibition of
XX human Nav1.3 expression, the oligonucleotides are designed to target
XX different regions of the human Nav1.3 RNA.
XX SQ Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 20 AAAAAAAAAAAAAAAAAA 2

RESULT 863
ADM14246/C
ID ADM14246 standard; DNA; 20 BP.
XX AC ADM14246;
XX DT 01-JUL-2004 (first entry)
XX DE Human mPGES-1 chimeric antiseense oligonucleotide SEQ ID NO.433.
XX KW chimeric; antiseense oligonucleotide; phosphorothioate; human;
XX KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
XX KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
XX KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
XX KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
XX KW immunomodulatory; cardiovascular; gene therapy; inflammation;
XX KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
XX KW reperfusion injury; ophthalmic disorder; immunological disorder;
XX KW cardiovascular disorder; neurological disorder; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX Key Location/Qualifiers
XX modified_base 1..20
XX FT
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FT FT /*tag= b
FT FT /mod_base= OTHER
FT FT /notes= "phosphorothioate linkages and all cytidine
FT FT residues are 5-methylcytidines"
FT FT modified_base
FT FT 1..5
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "2'-O-methoxyethyls"
FT FT modified_base
FT FT 16..20
FT FT /*tag= c
FT FT /mod_base= OTHER
FT FT /note= "2'-O-methoxyethyls"
XX XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 433; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulator, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
XX ophthalmological, immunomodulatory and cardiovascular activities, and can
XX be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
XX can be used for preparing a composition for treating a disease or
XX condition associated with mPGES-1 e.g., inflammation, Alzheimer's
XX disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
XX ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAA 1

RESULT 864
ADO46424/c
ID ADO46424 standard; DNA; 20 BP.
XX
XX ADO46424;
XX
XX 15-JUL-2004 (first entry)
XX
XX Human oligonucleotide #1790.
DE

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XX Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Botaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
XX Homo sapiens.
XX
XX US2004049022-A1.
XX
XX 11-MAR-2004.
XX
XX 25-JUL-2003; 2003US-00627930.
XX
XX 23-APR-2002; 2002WO-US013135.
XX 23-APR-2002; 2002WO-US013143.
XX
XX (NYCE/) NYCE J W.
XX (SAND/) SANDRASAGRA A.
XX (TANG/) TANG L.
XX (AGUI/) AGUILAR D.
XX (MILL/) MILLER S.
XX (SHAH/) SHAHABUDDIN S.
XX (LUHH/) LU H.
XX (CONG/) CONG H.
XX
XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
XX Shahabuddin S, Lu H, Cong H;
XX
XX WPI; 2004-293804/27.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
XX initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
XX RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
XX asthma.
XX
XX Claim 2; SEQ ID NO 1791; 174pp; English.
XX
XX The invention relates to oligonucleotides anti-sense to an initiation
XX codon, coding region, 5' or 3' intron-exon junction, intron or region
XX with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
XX chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
XX -5 receptor, CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
XX tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
XX also relates to a method of screening a candidate compound that binds to
XX one or more nucleic acid target(s) or expressed product(s), for the
XX prevention and/or treatment of a respiratory or lung disease. The
XX oligonucleotides are useful for reducing or inhibiting expression of a
XX gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
XX CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
XX tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
XX useful for preventing or treating a respiratory or lung disease. The
XX respiratory or lung disease is associated with hyper-responsiveness to
XX and/or increased levels of, adenosine and/or levels of adenosine A
XX receptor(s), and/or asthma and/or lung allergies associated with
XX inflammation or an inflammatory disease. The respiratory or lung disease
XX is chosen from airway inflammation, allergy, asthma, impeded respiration,
XX cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
XX allergic rhinitis, acute respiratory distress syndrome, pulmonary
XX hypertension, lung inflammation, bronchitis, airway obstruction or
XX bronchoconstriction. This sequence represents an oligonucleotide of the
XX invention.
XX
XX Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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```
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 865
ADW10727/C
ID ADW10727 standard; DNA; 20 BP.
XX
XX AC ADW10727;
XX
XX DT 07-APR-2005 (first entry)
XX
XX DE Oligo (dT)20 primer.
XX
KW Muscular-Gen.; transfection; DNA amplification; gene therapy;
KW growth disorder; musculoskeletal disease; neurological disease;
KW muscular dystrophy; DNA expression; ss; RT-PCR; reverse transcriptase;
KW primer.
XX
XX OS Synthetic.
XX
XX PN WO2005003389-A2.
XX
XX PD 13-JAN-2005.
XX
XX PF 25-JUN-2004; 2004WO-GB002787.
XX
XX PR 28-JUN-2003; 2003GB-00015160.
XX
XX PA (UNLO ) ROYAL HOLLOWAY & BEDFORD NEW COLLEGE.
XX
XX PI Dickinson G, Hill V;
XX
XX DR WPI; 2005-101507/11.
XX
XX PT Amplifying an unclonable DNA fragment in vitro, useful for transfecting
XX into a eukaryotic cell, comprises amplifying the fragment by rolling
XX circle amplification.
XX
XX PS Disclosure; SEQ ID NO 3; 72pp; English.
XX
XX CC The invention relates to a method of amplifying an unclonable DNA
XX fragment in vitro for transfection into a eukaryotic cell which comprises
XX amplifying the unclonable DNA fragment by rolling circle amplification
XX (RCA) to produce a tandem series of repeats of the unclonable DNA
XX fragment. The vector is used in therapy, specifically in gene therapy,
XX which may be for muscular dystrophy and for DNA expression studies. The
XX method and kit are useful for amplifying an unclonable DNA fragment in
XX vitro. The present sequence represents an oligo (dT)20 primer.
XX
XX SQ Sequence 20 BP; 0 A; 0 C; 0 G; 19 T; 0 U; 1 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 866
AEC04052
ID AEC04052 standard; cDNA; 20 BP.
XX
XX AC AEC04052;
XX
XX DT 20-OCT-2005 (first entry)
XX
XX DE Human breast cancer marker cDNA SEQ ID NO 219.
XX

Cytostatic; Gene therapy; diagnosis; breast tumor; endocrine disease;
gynecology and obstetrics; neoplasm; ss; tumor marker.

Homo sapiens.

WO2005072050-A2.
11-AUG-2005.
27-JAN-2005; 2005WO-IB000433.
27-JAN-2004; 2004US-0539128P.
27-JAN-2004; 2004US-0539129P.
22-OCT-2004; 2004US-0620656P.
22-OCT-2004; 2004US-0620853P.
22-OCT-2004; 2004US-0620874P.
22-OCT-2004; 2004US-0620916P.
22-OCT-2004; 2004US-0620917P.
22-OCT-2004; 2004US-0620918P.
22-OCT-2004; 2004US-0620924P.
22-OCT-2004; 2004US-0620974P.
22-OCT-2004; 2004US-0620975P.
22-OCT-2004; 2004US-0621004P.
22-OCT-2004; 2004US-0621131P.
17-NOV-2004; 55US-00043842.
17-NOV-2004; 2004US-0620123P.
17-NOV-2004; 2004US-0628101P.
17-NOV-2004; 2004US-0628111P.
17-NOV-2004; 2004US-0628112P.
17-NOV-2004; 2004US-0628134P.
17-NOV-2004; 2004US-0628145P.
17-NOV-2004; 2004US-0628156P.
17-NOV-2004; 2004US-0628167P.
17-NOV-2004; 2004US-0628178P.
17-NOV-2004; 2004US-0628231P.
17-NOV-2004; 2004US-0628251P.
27-JAN-2005; 2005US-00043842.

(COMP-) COMPUGEN USA INC.

Toporik A, Dahary D, Sorek R, Pollock S, Levine Z, Akiva P;
Diber A, Novik A, Sella-Tavor O, Ayalon-Soifer M, Walach S;
Sameah-Greenwald S, Shemesh R, Keren N, Shklar M;
WPI; 2005-555592/56.

New human nucleic acid and polypeptide sequences useful for screening,
diagnosing or treating breast cancer.

Disclosure; SEQ ID NO 219; 1586pp; English.

The invention relates to an isolated human polynucleotide. The
composition and methods are useful for screening, diagnosing or treating
breast cancer. These may also be used in drug screening or in monitoring
disease progression and/or treatment efficacy of breast cancer. The
present sequence represents a human small inducible cytokine B14
precursor breast cancer marker cDNA.

Sequence 20 BP; 18 A; 0 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 2 TAAAAAAAAAAAAAAAAAAAAA 20

RESULT 867
AED13295
ID AED13295 standard; DNA; 20 BP.
XX
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AC AED13295;
XX
XX DT 01-DEC-2005 (first entry)
XX
XX DE Oligonucleotide ODN3 used to illustrate nucleic acid labeling method.
XX
XX KW DNA detection; RNA detection; SNP detection; ss.
XX
XX OS Synthetic.
XX
XX PN JP2005265617-A.
XX
XX PD 29-SEP-2005.
XX
XX PF 18-MAR-2004; 2004JP-00078900.
XX
XX PR 18-MAR-2004; 2004JP-00078900.
XX
XX PA (TAKE/) TAKENAKA S.
XX
XX PI Takenaka S, Nojima T, Mukumoto K, Tabata E;
XX
XX DR WPI; 2005-685344/71.
XX
XX PT Labeling double stranded nucleic acid, involves utilizing carbodiimide
XX
XX PT derivative for labeling thymine, uracil and guanine, which exists in
XX
XX PT mismatch region of nucleic acid or unstable region of hydrogen bond of
XX
XX PT nucleic acid.
XX
XX PS Example 1; Page 24; 40pp; Japanese.
XX
XX CC The present invention relates to a method (M1) for labeling double
XX
XX CC stranded nucleic acid for efficient detection of DNA or RNA. The method
XX
XX CC comprises using a carbodiimide derivative for labeling one or more of
XX
XX CC thymine, uracil and guanine, which exists in the mismatch region of the
XX
XX CC double stranded nucleic acid or its vicinity, or unstable region of the
XX
XX CC labeling bond of the double stranded nucleic acid. (M1) is useful for
XX
XX CC labeling double stranded or single stranded nucleic acid or detecting
XX
XX CC single nucleotide polymorphisms. The present sequence was used to
XX
XX CC illustrate the method of the invention.
XX
XX SQ Sequence 20 BP; 19 A; 0 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 2 AAAAAAAAAAAAAAAAAA 20

RESULT 868
AAQ75718/c
ID AAQ75718 standard; DNA; 21 BP.
AC
XX
XX AAQ75718;
XX
XX 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PS Sequence 21 BP; 19 A; 0 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 2 AAAAAAAAAAAAAAAAAA 20

RESULT 869
AAQ75715/c
ID AAQ75715 standard; DNA; 21 BP.
AC
XX
XX AAQ75715;
XX
XX 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 8; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX
XX CC and using the aggregate of mRNAs as the template for each reverse
XX
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2725
Db 19 CTAATAAAAAAAAAAAAAA 1

RESULT 869
AAQ75715/c
ID AAQ75715 standard; DNA; 21 BP.
AC
XX
XX AAQ75715;
XX
XX 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 8; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX
XX CC and using the aggregate of mRNAs as the template for each reverse
XX
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

```


Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2725
 |||||
 Db 19 CTAAGAAAAAAGAAAAA 1

RESULT 870
 AAQ75703/c
 ID - AAQ75703 standard; DNA; 21 BP.

XX AC AAQ75703;
 XX
 XX 04-AUG-1995 (first entry)
 XX
 XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 XX Synthetic.

XX JP06303997-A.
 XX
 XX 01-NOV-1994.

XX
 XX 16-APR-1993; 93JP-00112515.
 XX
 XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 XX Disclosure; Page 7; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 21 BP; 1 A; 0 C; 3 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2725
 |||||
 Db 19 CTAAGAAAAAAGAAAAA 1

RESULT 871
 AAQ75705/c
 ID AAQ75705 standard; DNA; 21 BP.

XX AC AAQ75705;
 XX
 XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX Disclosure; Page 7; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX

SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 8.1e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2725

Db 19 CTAAGAAAAAAGAAAAA 1

RESULT 872

AAQ75706/c

ID AAQ75706 standard; DNA; 21 BP.

XX AC AAQ75706;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

XX aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed

PT by digestion with restriction enzymes.

XX Disclosure; Page 7; 11pp; Japanese.

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2725
|||||
DB 19 CTAAGAAAAAAGAAAAA 1

RESULT 873

AAQ75717/c

ID AAQ75717 standard; DNA; 21 BP.

XX

AC AAQ75717;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.

XX Disclosure; Page 8; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2725
|||||
DB 19 CTAAGAAAAAAGAAAAA 1

RESULT 874

AAQ75707/c

ID AAQ75707 standard; DNA; 21 BP.

XX

AC AAQ75707;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.

XX Disclosure; Page 7; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 2 A; 0 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2725
|||||
DB 19 CTAAGAAAAAAGAAAAA 1

RESULT 875

AAQ75710/c

ID AAQ75710 standard; DNA; 21 BP.

XX

AC AAQ75710;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726
|||||

Db 19 TAAAAAATAAAAAAAAAA 1

RESULT 878

ADK01281/c

ID ADK01281 standard; DNA; 21 BP.

XX AC ADK01281;

XX DT 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #1.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX PD 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.

XX Example; Page 4; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It

CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.

SQ Sequence 21 BP; 3 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726

Db 19 TAAAAAATAAAAAAAAAA 1

RESULT 879

ADK01335/c

ID ADK01335 standard; DNA; 21 BP.

XX AC ADK01335;

XX DT 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #55.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX PD 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.

XX Example; Page 6; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food

CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX SQ Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
 |||||
 Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 890

ADK01291/c

ID ADK01291 standard; DNA; 21 BP.

AC ADK01291;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #11.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,

CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX SQ Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 19 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 881

ADK01295/c

ID ADK01295 standard; DNA; 21 BP.

AC ADK01295;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #15.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,

CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX
 SQ Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
 Db 19 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 882
 ADK01283/c
 ID ADK01283 standard; DNA; 21 BP.
 XX
 AC ADK01283;
 XX
 DT 06-MAY-2004 (first entry)
 DE Rat DNA microarray capture oligonucleotide #3.
 XX
 KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.
 XX
 OS Rattus sp.
 XX
 PN DE10208794-A1.
 XX
 PD 04-SEP-2003.
 XX
 PF 28-FEB-2002; 2002DE-01008794.
 XX
 PR 28-FEB-2002; 2002DE-01008794.
 XX
 PA (DEGS) DEGUSSA BIOACTIVES GMBH.
 XX
 PI Boekenkamp D, Dieck HT, Hoppe H;
 XX
 DR WPI; 2003-714082/68.
 XX
 XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.
 XX
 PS Example; Page 4; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture

CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX
 SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
 Db 19 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 883
 ADK01339/c
 ID ADK01339 standard; DNA; 21 BP.
 XX
 AC ADK01339;
 XX
 DT 06-MAY-2004 (first entry)
 DE Rat DNA microarray capture oligonucleotide #59.
 XX
 KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.
 XX
 OS Rattus sp.
 XX
 PN DE10208794-A1.
 XX
 PD 04-SEP-2003.
 XX
 PF 28-FEB-2002; 2002DE-01008794.
 XX
 PR 28-FEB-2002; 2002DE-01008794.
 XX
 PA (DEGS) DEGUSSA BIOACTIVES GMBH.
 XX
 PI Boekenkamp D, Dieck HT, Hoppe H;
 XX
 DR WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 6; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides

CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 2 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2727

Db 19 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 884

ADK01289/c

ID ADK01289 standard; DNA; 21 BP.

AC ADK01289;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #9.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

PI Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded

CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 8.1e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726

Db 19 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 885

ADK01294/c

ID ADK01294 standard; DNA; 21 BP.

XX ADK01294;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #14.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded

XX nucleic acids by isolation and hybridisation of nucleic acid pools, then

XX reading out, where the nucleic acids are selectively bound using capture

XX agents that are (a) immobilised on the surface of a solid matrix and (b)

XX comprise variable and non-variable regions. The capture oligonucleotides

XX have a 5'-invariable anchor region, the complement of which is present at

XX least once in each nucleic acid and a 3'-variable, discriminatory region

XX that comprises all possible combinations of up to 10 nucleotides to allow

XX binding of particular sorts of single stranded nucleic acids. The capture

XX agents are particularly locked nucleic acids (LNA) and the anchor region

XX comprises a sequence of 10-50, particularly 15-25, T residues. The

XX capture oligonucleotides are biotinylated and immobilised on a surface by

XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,

XX metal, resin, gel, crystalline material and/or membrane, having semi-

XX conducting properties and especially in the form of a chip. Its surface

XX is particularly a layer of (bi)molecular filaments and binding of single

XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,

XX physical, stimulated by an electrical field or through a molecular sieve.

XX The method is used (i) for analysis of patterns, especially in mucosal,

XX hair root, blood, nerve or germ cells and (ii) for determining the

XX activity of pharmaceuticals and/or nutritional compounds, e.g. food

XX additives or supplements, especially minerals, trace elements, organic

XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and

XX mixtures. The method provides rapid, inexpensive and reproducible

XX representation of differences in pools of nucleic acids from cells. It

XX allows imaging of the complete pattern of all nucleic acid in a cell, and

XX can detect very small differences in the nucleic acid pool. Since the

XX method is based on comparison of nucleic acid pools, not individual

XX genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent

XX capture probes used in the method of the invention.

XX

SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 8.1e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2736

DB 19 TAAAAAATAAAAAAAAAA 1

RESULT 886

ADZ98945

ID ADZ98945 standard; RNA; 21 BP.

XX

AC ADZ98945;

XX

DT 28-JUL-2005 (first entry)

XX

DE Human KU70 transcript siRNA sense oligonucleotide siRNA1.

XX

KW protein interaction; short interfering RNA; siRNA; RNA interference;

KW gene silencing; ds.

XX

OS Homo sapiens.

OS Synthetic.

XX

FH Key Location/Qualifiers

FT misc_feature 20..21

FT /*tag= a

FT /note= "2'-deoxythymine overhang"

XX

PN US2005112118-A1.

XX

XX

PD 26-MAY-2005.

XX

PF 20-OCT-2003; 2003US-00690276.

XX

XX 02-DEC-1999; 99US-0168377P.

PR

PR 02-DEC-1999; 99US-0168379P.

PR 25-FEB-2000; 2000US-0185056P.

PR 01-DEC-2000; 2000US-00727384.

PR 14-DEC-2000; 2000US-0255063P.

PR 21-DEC-2000; 2000US-0256986P.

PR 04-JAN-2001; 2001US-0259571P.

PR 04-JAN-2001; 2001US-0259572P.

PR 15-MAR-2001; 2001US-0276179P.

PR 19-MAR-2001; 2001US-0277013P.

PR 23-JUL-2001; 2001US-0307233P.

PR 14-DEC-2001; 2001US-00014814.

PR 21-DEC-2001; 2001US-00024599.

PR 04-JAN-2002; 2002US-00035343.

PR 04-JAN-2002; 2002US-00035344.

PR 14-MAR-2002; 2002US-00099924.

PR 18-MAR-2002; 2002US-00100503.

XX (MYRI-) MYRIAD GENETICS INC.

XX

PI Cimbara D, Heichman K, Bartel P, Mauck K, Bush A;

XX

XX WPI; 2005-371623/38.

XX

PT Modulating, in a host cell, a protein-protein interaction between first

PT protein, PRAK. (MAPKAPK5) and second protein, ERK3, (extracellular signal

PT -regulated kinase 3) by administering modulating compound.

XX

PS Disclosure; Fig 49; 296pp; English.

XX

XX The invention relates to a method for modulating, in a host cell, a

XX protein-protein interaction between a first protein which is PRAK (P38-

XX regulated/activated protein kinase or MAPKAPK5) and a second protein

XX which is ERK3 (extracellular signal-regulated kinase 3). The method

XX comprises administering to the cell a compound capable of modulating the

XX protein-protein interaction. The method is useful in modulating in a host

XX cell a second protein interaction between a first protein which is PRAK

XX and a second protein which is ERK3 for treating inflammation or

XX inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile

XX chronic arthritis, myositis, Crohn's disease, gastritis, colitis,

XX ulcerative colitis, inflammatory bowel disease, proctitis, pelvic

XX inflammatory disease, systemic lupus erythematosus, rhinitis,

XX conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary

XX Lyme disease, psoriasis, dermatitis or eczema. The present sequence

XX represents an siRNA (short interfering RNA) oligonucleotide targeting the

XX KU70 transcript, which is used in the exemplification of the present

XX invention.

XX

SQ Sequence 21 BP; 7 A; 3 C; 4 G; 2 T; 5 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;

Best Local Similarity 73.7%; Pred. No. 8.1e+02;

Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

QY 996 AACGAATTCAGAGCTTGA 1014

DB 1 AACGAATTCAGAGCTTGA 19

RESULT 887

ADZ98947

ID ADZ98947 standard; RNA; 21 BP.

XX

AC ADZ98947;

XX

DT 28-JUL-2005 (first entry)

XX

DE Human KU70 transcript siRNA sense oligonucleotide siRNA2.

XX

KW protein interaction; short interfering RNA; siRNA; RNA interference;

KW gene silencing; ds.

XX

OS Homo sapiens.

OS Synthetic.


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XX FH Key Location/Qualifiers
XX FT misc_feature 20..21
XX FT /*tag= a
XX FT /note= "2'-deoxythymine overhang"
XX PN US2005112118-A1.
XX XX
XX PD 26-MAY-2005.
XX PF 20-OCT-2003; 2003US-00690276.
XX PR 02-DEC-1999; 99US-0168377P.
XX PR 02-DEC-1999; 99US-0168379P.
XX PR 25-FEB-2000; 2000US-0185056P.
XX PR 01-DEC-2000; 2000US-00727384.
XX PR 14-DEC-2000; 2000US-0255063P.
XX PR 21-DEC-2000; 2000US-0256986P.
XX PR 04-JAN-2001; 2001US-0259571P.
XX PR 04-JAN-2001; 2001US-0259572P.
XX PR 15-MAR-2001; 2001US-0276179P.
XX PR 23-JUL-2001; 2001US-0307233P.
XX PR 19-MAR-2001; 2001US-0277013P.
XX PR 23-JUL-2001; 2001US-0307233P.
XX PR 14-DEC-2001; 2001US-00014814.
XX PR 21-DEC-2001; 2001US-00024599.
XX PR 04-JAN-2002; 2002US-00035344.
XX PR 14-MAR-2002; 2002US-00099924.
XX PR 18-MAR-2002; 2002US-00100503.
XX XX
XX PA (MYRI-) MYRIAD GENETICS INC.
XX XX
XX PI Cimbroa D, Heichman K, Bartel P, Mauck K, Bush A;
XX XX WPI; 2005-371623/38.
XX XX
XX PT Modulating, in a host cell, a protein-protein interaction between first
XX FT protein, PRAK, (MAPKAPK5) and second protein, ERK3, (extracellular signal
XX FT -regulated kinase 3) by administering modulating compound.
XX XX
XX PS Disclosure; Fig 49; 296pp; English.
XX XX
XX CC The invention relates to a method for modulating, in a host cell, a
XX CC protein-protein interaction between a first protein which is PRAK (P38-
XX CC regulated/activated protein kinase or MAPKAPK5) and a second protein
XX CC which is ERK3 (extracellular signal-regulated kinase 3). The method
XX CC comprises administering to the cell a compound capable of modulating the
XX CC protein-protein interaction. The method is useful in modulating in a host
XX CC cell a protein-protein interaction between a first protein which is PRAK
XX CC and a second protein which is ERK3 for treating inflammation or
XX CC inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile
XX CC chronic arthritis, myositis, Crohn's disease, gastritis, colitis,
XX CC ulcerative colitis, inflammatory bowel disease, proctitis, pelvic
XX CC inflammatory disease, systemic lupus erythematosus, rhinitis,
XX CC conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary
XX CC Lyme disease, psoriasis, dermatitis or eczema. The present sequence
XX CC represents an siRNA (short interfering RNA) oligonucleotide targeting the
XX CC KU70 transcript, which is used in the exemplification of the present
XX CC invention.
XX XX
XX SQ Sequence 21 BP; 5 A; 2 C; 7 G; 2 T; 5 U; 0 Other;
XX XX
XX Query Match 0.7%; Score 19; DB 1; Length 21;
XX Best Local Similarity 73.7%; Pred. No. 8.1e+02;
XX Matches 14; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
XX XX
XX Qy 2038 GATGAGGCGTATCGTTGAG 2056
XX ||:|||||:|:|:|
XX Db 1 GAUGAGGCGUACUGUGAG 19
XX
XX RESULT 888
XX ADZ98949
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ID ADZ98949 standard; RNA; 21 BP.
XX AC ADZ98949;
XX XX
XX DT 28-JUL-2005 (first entry)
XX XX
XX DE Human KU70 transcript siRNA sense oligonucleotide siRNA3.
XX XX
XX KW protein interaction; short interfering RNA; siRNA; RNA interference;
XX KW gene silencing; ds.
XX OS Homo sapiens.
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
XX FT misc_feature 20..21
XX FT /*tag= a
XX FT /note= "2'-deoxythymine overhang"
XX XX
XX PN US2005112118-A1.
XX XX
XX PD 26-MAY-2005.
XX XX
XX PF 20-OCT-2003; 2003US-00690276.
XX XX
XX PR 02-DEC-1999; 99US-0168377P.
XX PR 02-DEC-1999; 99US-0168379P.
XX PR 25-FEB-2000; 2000US-0185056P.
XX PR 01-DEC-2000; 2000US-00727384.
XX PR 14-DEC-2000; 2000US-0255063P.
XX PR 21-DEC-2000; 2000US-0256986P.
XX PR 04-JAN-2001; 2001US-0259571P.
XX PR 04-JAN-2001; 2001US-0259572P.
XX PR 15-MAR-2001; 2001US-0276179P.
XX PR 19-MAR-2001; 2001US-0277013P.
XX PR 23-JUL-2001; 2001US-0307233P.
XX PR 14-DEC-2001; 2001US-00014814.
XX PR 21-DEC-2001; 2001US-00024599.
XX PR 04-JAN-2002; 2002US-00035344.
XX PR 14-MAR-2002; 2002US-00099924.
XX PR 18-MAR-2002; 2002US-00100503.
XX XX
XX PA (MYRI-) MYRIAD GENETICS INC.
XX XX
XX PI Cimbroa D, Heichman K, Bartel P, Mauck K, Bush A;
XX XX WPI; 2005-371623/38.
XX XX
XX PT Modulating, in a host cell, a protein-protein interaction between first
XX FT protein, PRAK, (MAPKAPK5) and second protein, ERK3, (extracellular signal
XX FT -regulated kinase 3) by administering modulating compound.
XX XX
XX PS Disclosure; Fig 49; 296pp; English.
XX XX
XX CC The invention relates to a method for modulating, in a host cell, a
XX CC protein-protein interaction between a first protein which is PRAK (P38-
XX CC regulated/activated protein kinase or MAPKAPK5) and a second protein
XX CC which is ERK3 (extracellular signal-regulated kinase 3). The method
XX CC comprises administering to the cell a compound capable of modulating the
XX CC protein-protein interaction. The method is useful in modulating in a host
XX CC cell a protein-protein interaction between a first protein which is PRAK
XX CC and a second protein which is ERK3 for treating inflammation or
XX CC inflammatory disorders, e.g., asthma, rheumatoid arthritis, juvenile
XX CC chronic arthritis, myositis, Crohn's disease, gastritis, colitis,
XX CC ulcerative colitis, inflammatory bowel disease, proctitis, pelvic
XX CC inflammatory disease, systemic lupus erythematosus, rhinitis,
XX CC conjunctivitis, scleritis, chronic inflammatory polyneuropathy, Tertiary
XX CC Lyme disease, psoriasis, dermatitis or eczema. The present sequence
XX CC represents an siRNA (short interfering RNA) oligonucleotide targeting the
XX CC KU70 transcript, which is used in the exemplification of the present
XX CC invention.
```



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PD XX 06-OCT-2005.
PF XX 07-MAR-2005; 2005US-00075234.
XX XX
XX XX 04-JAN-2001; 2001US-0259571P.
XX XX 04-JAN-2001; 2001US-0259573P.
XX XX 14-MAR-2001; 2001US-0276259P.
XX XX 15-MAR-2001; 2001US-0276179P.
XX XX 19-MAR-2001; 2001US-0277013P.
XX XX 16-APR-2001; 2001US-0284095P.
XX XX 17-APR-2001; 2001US-0284220P.
XX XX 17-APR-2001; 2001US-0284404P.
XX XX 30-APR-2001; 2001US-0285324P.
XX XX 10-JUL-2001; 2001US-0287513P.
XX XX 23-JUL-2001; 2001US-0307233P.
XX XX 22-OCT-2001; 2001US-0307233P.
XX XX 25-OCT-2001; 2001US-0307233P.
XX XX 04-JAN-2002; 2002US-00035344.
XX XX 07-JAN-2002; 2002US-0346384P.
XX XX 17-JAN-2002; 2002US-0349843P.
XX XX 06-FEB-2002; 2002US-0354899P.
XX XX 14-MAR-2002; 2002US-00098979.
XX XX 18-MAR-2002; 2002US-00100503.
XX XX 15-APR-2002; 2002US-00122573.
XX XX 17-APR-2002; 2002US-00124550.
XX XX 17-APR-2002; 2002US-00124767.
XX XX 18-APR-2002; 2002US-00125639.
XX XX 29-APR-2002; 2002US-00135802.
XX XX
XX XX (MYRI-) MYRIAD GENETICS INC.
XX XX
XX XX Bartel P, Cimbora D, Sugiyama J, Wettstein DA, Heichman K;
XX XX WPI; 2005-664172/68.
XX XX
XX XX New isolated protein complex having a first protein interacting with a
XX XX second protein, useful for treating or preventing, e.g. cancer, ischemia,
XX XX stroke, autoimmune diseases, diabetes, coronary heart disease, or asthma.
XX XX
XX XX Disclosure, Fig 62; 198pp; English.
XX XX
XX XX The invention relates to a novel isolated protein complex having a first
XX XX protein interacting with a second protein. The invention further
XX XX comprises: a protein microarray comprising the protein complex; a method
XX XX for selecting modulators of the protein complex; a method of selecting
XX XX modulators of an interaction between a first protein and a second protein
XX XX ; and the treating and/or preventing of diseases and disorders associated
XX XX with the protein complexes. The protein complexes are useful in screening
XX XX assays for identifying compounds effective in modulating the protein
XX XX complexes, and in treating and/or preventing diseases and disorders
XX XX associated with the protein complexes. The diseases and disorders include
XX XX cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
XX XX diabetes, coronary heart disease, neurodegenerative diseases, asthma,
XX XX inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,
XX XX AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
XX XX sequence represents an siRNA oligo which targets the transcript of a
XX XX protein forming part of a protein-protein complex of the invention.
XX XX
XX XX Sequence 21 BP; 9 A; 1 C; 5 G; 2 T; 4 U; 0 Other;
XX XX
XX XX Query Match 0.7%; Score 19; DB 1; Length 21;
XX XX Best Local Similarity 78.9%; Pred. No. 8.1e+02;
XX XX Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX XX
XX QY 1632 AGATTATCTGGAGAAAGA 1650
XX Db 1 AGAUUAUACUGGAGAAAGA 19
XX
XX RESULT 891
XX AED42749/c

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ID XX AED42749 standard; RNA; 21 BP.
XX AC AED42749;
XX XX
XX DT 15-DEC-2005 (first entry)
XX XX
XX DE Protein interacting gene transcript siRNA antisense oligo #173.
XX XX
XX KW Cytostatic; Vasotropic; Cerebroprotective; Immunosuppressive;
XX KW Antidiabetic; Cardiant; Neuroprotective; Antiasthmatic; Antiinflammatory;
XX KW Antibacterial; Osteopathic; Anorectic; Virucide; Anti-HIV; Nephrotropic;
XX KW Antiarteriosclerotic; Muscular-Gen.; protein interaction;
XX KW Protein microarray; cancer; familial adenomatous polyposis;
XX KW Gastrointestinal-gen.; ischemia; cerebrovascular ischemia;
XX KW Autoimmune disease; diabetes; heart disease; neurodegenerative disease;
XX KW asthma; inflammation; sepsis; osteoporosis; obesity; viral infection;
XX KW acquired immune deficiency syndrome; glomerulonephritis; atherosclerosis;
XX KW muscular dystrophy; ss; short interfering RNA; RNA interference;
XX KW gene silencing.
XX OS Unidentified; Synthetic.
XX XX
XX PH Key Location/Qualifiers
XX FT misc_feature 20..21
XX FT /*tag= a
XX FT /note= "3' overhang comprising two 2'-deoxythymine
XX XX residues linked by a 5'-3' phosphodiester linkage"
XX PN US2005222029-A1.
XX XX
XX PD 06-OCT-2005.
XX XX
XX PF 07-MAR-2005; 2005US-00075234.
XX XX
XX PR 04-JAN-2001; 2001US-0259571P.
XX PR 04-JAN-2001; 2001US-0259573P.
XX PR 14-MAR-2001; 2001US-0276259P.
XX PR 15-MAR-2001; 2001US-0276179P.
XX PR 19-MAR-2001; 2001US-0277013P.
XX PR 16-APR-2001; 2001US-0284095P.
XX PR 17-APR-2001; 2001US-0284220P.
XX PR 17-APR-2001; 2001US-0284404P.
XX PR 19-APR-2001; 2001US-0285324P.
XX PR 30-APR-2001; 2001US-0287513P.
XX PR 10-JUL-2001; 2001US-0304101P.
XX PR 23-JUL-2001; 2001US-0307233P.
XX PR 22-OCT-2001; 2001US-0347829P.
XX PR 25-OCT-2001; 2001US-0343818P.
XX PR 04-JAN-2002; 2002US-00035344.
XX PR 07-JAN-2002; 2002US-0346384P.
XX PR 17-JAN-2002; 2002US-0349843P.
XX PR 06-FEB-2002; 2002US-0354899P.
XX PR 14-MAR-2002; 2002US-00098979.
XX PR 14-MAR-2002; 2002US-00099924.
XX PR 15-APR-2002; 2002US-00100503.
XX PR 17-APR-2002; 2002US-00122573.
XX PR 17-APR-2002; 2002US-00124550.
XX PR 17-APR-2002; 2002US-00124767.
XX PR 18-APR-2002; 2002US-00125639.
XX PR 29-APR-2002; 2002US-00135802.
XX XX
XX XX (MYRI-) MYRIAD GENETICS INC.
XX XX
XX XX Bartel P, Cimbora D, Sugiyama J, Wettstein DA, Heichman K;
XX XX WPI; 2005-664172/68.
XX XX
XX XX New isolated protein complex having a first protein interacting with a
XX XX second protein, useful for treating or preventing, e.g. cancer, ischemia,
XX XX stroke, autoimmune diseases, diabetes, coronary heart disease, or asthma.
XX XX
XX XX Disclosure, Fig 62; 198pp; English.
XX XX
XX XX The invention relates to a novel isolated protein complex having a first
XX XX protein interacting with a second protein. The invention further
XX XX comprises: a protein microarray comprising the protein complex; a method
XX XX for selecting modulators of the protein complex; a method of selecting
XX XX modulators of an interaction between a first protein and a second protein
XX XX ; and the treating and/or preventing of diseases and disorders associated
XX XX with the protein complexes. The protein complexes are useful in screening
XX XX assays for identifying compounds effective in modulating the protein
XX XX complexes, and in treating and/or preventing diseases and disorders
XX XX associated with the protein complexes. The diseases and disorders include
XX XX cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
XX XX diabetes, coronary heart disease, neurodegenerative diseases, asthma,
XX XX inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,
XX XX AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
XX XX sequence represents an siRNA oligo which targets the transcript of a
XX XX protein forming part of a protein-protein complex of the invention.
XX XX
XX XX Sequence 21 BP; 9 A; 1 C; 5 G; 2 T; 4 U; 0 Other;
XX XX
XX XX Query Match 0.7%; Score 19; DB 1; Length 21;
XX XX Best Local Similarity 78.9%; Pred. No. 8.1e+02;
XX XX Matches 15; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
XX XX
XX QY 1632 AGATTATCTGGAGAAAGA 1650
XX Db 1 AGAUUAUACUGGAGAAAGA 19
XX
XX RESULT 891
XX AED42749/c

```

CC The invention relates to a novel isolated protein complex having a first
CC protein interacting with a second protein. The invention further
CC comprises: a protein microarray comprising the protein complex; a method
CC for selecting modulators of the protein complex; a method of selecting
CC modulators of an interaction between a first protein and a second protein
CC ; and the treating and/or preventing of diseases and disorders associated
CC with the protein complexes. The protein complexes are useful in screening
CC assays for identifying compounds effective in modulating the protein
CC complexes, and in treating and/or preventing diseases and disorders
CC associated with the protein complexes. The diseases and disorders include
CC cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
CC diabetes, coronary heart disease, neurodegenerative diseases, asthma,
CC inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,
CC AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
CC sequence represents an siRNA oligo which targets the transcript of a
CC protein forming part of a protein-protein complex of the invention.

XX Sequence 21 BP; 4 A; 3 C; 7 G; 2 T; 5 U; 0 Other;

SQ Query Match 0.7%; Score 19; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 8.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1063 CCACGGATCTGACTACTCA 1081
DB 19 CCACGGATCTGACTACTCA 1

RESULT 892

AED42745/c
ID AED42745 standard; RNA; 21 BP.

XX AC AED42745;

XX 15-DEC-2005 (first entry)

XX Protein interacting gene transcript siRNA antisense oligo #171.

XX Cytostatic; Vasotropic; Cerebroprotective; Immunosuppressive;
KW Antidiabetic; Cardiant; Neuroprotective; Antiasthmatic; Antiinflammatory;
KW Antibacterial; Osteopathic; Anorectic; Virucide; Anti-HIV; Nephrotropic;
KW Antiartherosclerotic; Muscular-Gen.; protein interaction;
KW protein microarray; cancer; familial adenomatous polyposis;
KW Gastrointestinal-gen.; ischemia; cerebrovascular ischemia;
KW autoimmune disease; diabetes; heart disease; neurodegenerative disease;
KW asthma; inflammation; sepsis; osteoporosis; obesity; viral infection;
KW acquired immune deficiency syndrome; glomerulonephritis; atherosclerosis;
KW muscular dystrophy; ss; short interfering RNA; RNA interference;
KW gene silencing.

XX Unidentified; Synthetic.

XX Key Location/Qualifiers

FT misc_feature 20..21 a

FT /note= "3' overhang comprising two 2'-deoxythymine
residues linked by a 5'-3' phosphodiester linkage"

XX US2005222029-A1.

XX 06-OCT-2005.

XX 07-MAR-2005; 2005US-00075234.

XX 04-JAN-2001; 2001US-0259571P.

XX 04-JAN-2001; 2001US-0259573P.

XX 14-MAR-2001; 2001US-0276259P.

XX 15-MAR-2001; 2001US-0276179P.

XX 19-MAR-2001; 2001US-0277013P.

XX 16-APR-2001; 2001US-0284095P.

XX 17-APR-2001; 2001US-0284220P.

XX 17-APR-2001; 2001US-0284404P.

XX 19-APR-2001; 2001US-0285324P.

PR 30-APR-2001; 2001US-0287513P.
PR 10-JUL-2001; 2001US-0304101P.
PR 23-JUL-2001; 2001US-0307233P.
PR 22-OCT-2001; 2001US-0347823P.
PR 25-OCT-2001; 2001US-0343818P.
PR 04-JAN-2002; 2002US-00035344.
PR 07-JAN-2002; 2002US-0346384P.
PR 17-JAN-2002; 2002US-0349843P.
PR 06-FEB-2002; 2002US-0354899P.
PR 14-MAR-2002; 2002US-00098979.
PR 14-MAR-2002; 2002US-00099924.
PR 18-MAR-2002; 2002US-00100503.
PR 15-APR-2002; 2002US-00122573.
PR 17-APR-2002; 2002US-00124550.
PR 17-APR-2002; 2002US-00124757.
PR 18-APR-2002; 2002US-00125639.
PR 29-APR-2002; 2002US-00135802.
XX (MYRI-) MYRIAD GENETICS INC.

XX Bartel P, Cimborra D, Sugiyama J, Wettstein DA, Heichman K;

XX WPI; 2005-664172/68.

XX New isolated protein complex having a first protein interacting with a
PT second protein, useful for treating or preventing, e.g. cancer, ischemia,
PT stroke, autoimmune diseases, diabetes, coronary heart disease, or asthma.

XX Disclosure; Fig 62; 198pp; English.

XX The invention relates to a novel isolated protein complex having a first
CC protein interacting with a second protein. The invention further
CC comprises: a protein microarray comprising the protein complex; a method
CC for selecting modulators of the protein complex; a method of selecting
CC modulators of an interaction between a first protein and a second protein
CC ; and the treating and/or preventing of diseases and disorders associated
CC with the protein complexes. The protein complexes are useful in screening
CC assays for identifying compounds effective in modulating the protein
CC complexes, and in treating and/or preventing diseases and disorders
CC associated with the protein complexes. The diseases and disorders include
CC cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
CC diabetes, coronary heart disease, neurodegenerative diseases, asthma,
CC inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,
CC AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
CC sequence represents an siRNA oligo which targets the transcript of a
CC protein forming part of a protein-protein complex of the invention.

XX Sequence 21 BP; 4 A; 5 C; 1 G; 2 T; 9 U; 0 Other;

SQ Query Match 0.7%; Score 19; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 8.1e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1632 AGATTATCTGAGAAAGA 1650

DB 19 AGATTATCTGAGAAAGA 1

RESULT 893

AED42747/c

ID AED42747 standard; RNA; 21 BP.

XX AC AED42747;

XX 15-DEC-2005 (first entry)

XX Protein interacting gene transcript siRNA antisense oligo #172.

XX Cytostatic; Vasotropic; Cerebroprotective; Immunosuppressive;
KW Antidiabetic; Cardiant; Neuroprotective; Antiasthmatic; Antiinflammatory;
KW Antibacterial; Osteopathic; Anorectic; Virucide; Anti-HIV; Nephrotropic;
KW Antiartherosclerotic; Muscular-Gen.; protein interaction;
KW protein microarray; cancer; familial adenomatous polyposis;

KW gastrointestinal-gen.; ischemia; cerebrovascular ischemia;
 KW autoimmune disease; diabetes; heart disease; neurodegenerative disease;
 KW ashma; inflammation; sepsis; osteoporosis; obesity; viral infection;
 KW acquired immune deficiency syndrome; glomerulonephritis; atherosclerosis;
 KW muscular dystrophy; ss; short interfering RNA; RNA interference;
 KW gene silencing.

XX Unidentified; Synthetic.

XX Key Location/Qualifiers
 FH misc_feature 20..21
 FT /tag= a
 FT /note= "3' overhang comprising two 2'-deoxythymine
 FT residues linked by a 5'-3' phosphodiester linkage"
 XX

FN US2005222029-A1.

XX 06-OCT-2005.

XX 07-MAR-2005; 2005US-00075334.

XX 04-JAN-2001; 2001US-0259571P.

XX 04-JAN-2001; 2001US-0259573P.

XX 14-MAR-2001; 2001US-0276259P.

XX 15-MAR-2001; 2001US-0276179P.

XX 19-MAR-2001; 2001US-0277013P.

XX 16-APR-2001; 2001US-0284095P.

XX 17-APR-2001; 2001US-0284220P.

XX 17-APR-2001; 2001US-0284404P.

XX 19-APR-2001; 2001US-0285324P.

XX 30-APR-2001; 2001US-0287513P.

XX 10-JUL-2001; 2001US-0304101P.

XX 23-JUL-2001; 2001US-0307233P.

XX 22-OCT-2001; 2001US-0347829P.

XX 25-OCT-2001; 2001US-0343818P.

XX 04-JAN-2002; 2002US-00035344.

XX 07-JAN-2002; 2002US-0346384P.

XX 17-JAN-2002; 2002US-0349843P.

XX 06-FEB-2002; 2002US-0354899P.

XX 14-MAR-2002; 2002US-00098979.

XX 14-MAR-2002; 2002US-00099924.

XX 18-MAR-2002; 2002US-00100503.

XX 15-APR-2002; 2002US-00122573.

XX 17-APR-2002; 2002US-00124550.

XX 17-APR-2002; 2002US-00124767.

XX 18-APR-2002; 2002US-00125639.

XX 29-APR-2002; 2002US-00135802.

XX (MYRI-) MYRIAD GENETICS INC.

XX Bartel P, Cimbora D, Sugiyama J, Wettstein DA, Reichman K;

XX WPI; 2005-664172/68.

XX New isolated protein complex having a first protein interacting with a
 PT second protein, useful for treating or preventing, e.g. cancer, ischemia,
 PT stroke, autoimmune diseases, diabetes, coronary heart disease, or asthma.

XX Disclosure; Fig 62; 198pp; English.

XX The invention relates to a novel isolated protein complex having a first
 CC protein interacting with a second protein. The invention further
 CC comprises: a protein microarray comprising the protein complex; a method
 CC for selecting modulators of the protein complex; a method of selecting
 CC modulators of an interaction between a first protein and a second protein
 CC ; and the treating and/or preventing of diseases and disorders associated
 CC with the protein complexes. The protein complexes are useful in screening
 CC assays for identifying compounds effective in modulating the protein
 CC complexes, and in treating and/or preventing diseases and disorders
 CC associated with the protein complexes. The diseases and disorders include
 CC cancer, adenomatous polyposis, ischemia, stroke, autoimmune diseases,
 CC diabetes, coronary heart disease, neurodegenerative diseases, asthma,
 CC inflammatory disorders, sepsis, osteoporosis, obesity, viral infection,

CC AIDS, glomerulonephritis, atherosclerosis, and muscular dystrophy. This
 CC sequence represents an siRNA oligo which targets the transcript of a
 CC protein forming part of a protein-protein complex of the invention.
 XX
 SQ Sequence 21 BP; 5 A; 4 C; 2 G; 2 T; 8 U; 0 Other;

Query Match 0.7%; Score 19; DB 1; Length 21;

Best Local Similarity 100.0%; Pred. No. 8.1e+02;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 858 AAGTGTGTACATCAGTAA 876

Db 19 AAGTGTGTACATCAGTAA 1

RESULT 894

AAF98936/C

ID AAF98936 standard; DNA; 22 BP.

XX AAF98936;

XX 12-JUN-2001 (first entry)

XX Immunostimulatory nucleic acid #52.

XX Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
 KW immunostimulatory; tumour; viral infection; bacterial infection;
 KW fungal infection; parasitic infection; cancer; asthma;
 KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.

XX Synthetic.

XX WO200122972-A2.

XX 05-APR-2001.

XX 25-SEP-2000; 2000WO-US026383.

XX 25-SEP-1999; 99US-0156113P.

XX 27-SEP-1999; 99US-0156135P.

XX 23-AUG-2000; 2000US-0227436P.

XX (IOWA) UNIV IOWA RES FOUND.

XX (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Schetter C, Vollmer J;

XX WPI; 2001-273485/28.

XX Vaccinating against tumors, infectious diseases, allergies and asthma
 PT using immunostimulatory Py-rich and TG nucleic acids.
 XX Disclosure; Page 39; 338pp; English.

XX The present invention relates to a method for stimulating an immune
 CC response. The method comprises administering an immunostimulatory nucleic
 CC acid to a non-rodent subject in sufficient quantity to stimulate an
 CC immune response. The present sequence is one such immunostimulatory
 CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
 CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
 CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
 CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
 CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
 CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
 CC also useful for preventing cancer, asthma, infectious disease, allergy or
 CC immune deficiency. The present sequence can also be used to redirect a
 CC Th2 to a Th1 immune response and to activate immune cells. Note: the
 CC present sequence may have a phosphorothioate backbone

XX Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.7%; Score 18.8; DB 1; Length 22;

90.9%; Pred. No. 8.5e+02;

```

Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
DB 22 AAAAAAAAAACCAAAAAAAAAA 1

RESULT 895
ABS7577/c
ID ABS75777 standard; DNA; 22 BP.
AC ABS75777;
XX
XX 13-DEC-2002 (first entry)
XX
XX Angiogenesis inhibitory oligonucleotide #61.
XX
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
XX diabetic retinopathy; retinopathy of prematurity; macular degeneration;
XX corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
XX rubiosis; Osler-Webber Syndrome; myocardial angiogenesis;
XX plaque neovascularisation; telangiectasia; haemophiliac joint;
XX angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
XX scleroderma; hypertrophic scar.
XX
XX Synthetic.
XX
XX WO200253141-A2.
XX
XX 11-JUL-2002.
XX
XX 14-DEC-2001; 2001WO-US048458.
XX
XX 14-DEC-2000; 2000US-0255534P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX
XX Bratzler RL;
XX
XX WPI; 2002-566690/60.
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
XX antiangiogenic nucleic acid molecule to the subject.
XX
XX Claim 2; Page 20; 276pp; English.
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
XX administering at least one antiangiogenic nucleic acid molecule. Also
XX included is a kit comprising a first container housing the antiangiogenic
XX nucleic acids, and instructions for administering them to a subject
XX having a condition characterised by unwanted angiogenesis. The method is
XX useful for inhibiting angiogenesis associated with solid tumour growth,
XX tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX rubiosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
XX neovascularisation, telangiectasia, haemophiliac joints, angiofibroma,
XX wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX hypertrophic scars. The present sequence is an antiangiogenic nucleic
XX acid of the invention
XX
XX Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.8; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 8.5e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
DB 22 AAAAAAAAAACCAAAAAAAAAA 1

RESULT 896
ABS7577/c
ID ABS75777 standard; DNA; 22 BP.
XX
XX 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
XX 22 AAAAAAAAAACCAAAAAAAAAA 1
XX
XX 25-SEP-2003 (first entry)
XX
XX Immunostimulatory nucleic acid #55.
XX
XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
XX antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
XX psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
XX inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
XX Synthetic.
XX
XX US2003050268-A1.
XX
XX 13-MAR-2003.
XX
XX 29-MAR-2002; 2002US-00112653.
XX
XX 29-MAR-2001; 2001US-0279642P.
XX
XX (KRIE/) KRIEG A. M.
XX (BERG/) BERG D. J.
XX
XX Krieg AM, Berg DJ;
XX
XX WPI; 2003-521815/49.
XX
XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
XX allergic contact dermatitis, latex dermatitis or inflammatory bowel
XX disease by administering an immunostimulatory nucleic acid.
XX
XX Disclosure; Page 10; 229pp; English.
XX
XX The invention describes a method of treating non-allergic inflammatory
XX disease comprising administering to a subject having or at risk of
XX developing a non-allergic inflammatory disease an immunostimulatory
XX nucleic acid for prevention or treatment of the disease. The method is
XX useful for treating non-allergic inflammatory diseases, such as
XX psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
XX inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
XX This sequence represents an immunostimulatory nucleic acid
XX
XX Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.8; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 8.5e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
DB 22 AAAAAAAAAACCAAAAAAAAAA 1
XX
XX 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
XX 22 AAAAAAAAAACCAAAAAAAAAA 1
XX
XX ADB36438/c
XX
XX ADB36438;
XX
XX 04-DEC-2003 (first entry)
XX
XX Immunostimulatory nucleic acid #52.
XX
XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX hypo-responsive subject; immunostimulatory.
XX
XX Synthetic.
XX

```

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RESULT 896
ACD99369/c
ID ACD99369 standard; DNA; 22 BP.
XX
XX ACD99369;
XX
XX 25-SEP-2003 (first entry)
XX
XX Immunostimulatory nucleic acid #55.
XX
XX Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
XX antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
XX psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
XX inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
XX Synthetic.
XX
XX US2003050268-A1.
XX
XX 13-MAR-2003.
XX
XX 29-MAR-2002; 2002US-00112653.
XX
XX 29-MAR-2001; 2001US-0279642P.
XX
XX (KRIE/) KRIEG A. M.
XX (BERG/) BERG D. J.
XX
XX Krieg AM, Berg DJ;
XX
XX WPI; 2003-521815/49.
XX
XX Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
XX allergic contact dermatitis, latex dermatitis or inflammatory bowel
XX disease by administering an immunostimulatory nucleic acid.
XX
XX Disclosure; Page 10; 229pp; English.
XX
XX The invention describes a method of treating non-allergic inflammatory
XX disease comprising administering to a subject having or at risk of
XX developing a non-allergic inflammatory disease an immunostimulatory
XX nucleic acid for prevention or treatment of the disease. The method is
XX useful for treating non-allergic inflammatory diseases, such as
XX psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
XX inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
XX This sequence represents an immunostimulatory nucleic acid
XX
XX Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.8; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 8.5e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
DB 22 AAAAAAAAAACCAAAAAAAAAA 1
XX
XX 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
XX 22 AAAAAAAAAACCAAAAAAAAAA 1
XX
XX ADB36438/c
XX
XX ADB36438;
XX
XX 04-DEC-2003 (first entry)
XX
XX Immunostimulatory nucleic acid #52.
XX
XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
XX hypo-responsive subject; immunostimulatory.
XX
XX Synthetic.
XX

```

PN US2003087848-A1.
 PD 08-MAY-2003.
 PF 02-FEB-2001; 2001US-00776479.
 PR 03-FEB-2000; 2000US-0179991P.
 XX (BRATZ) BRATZLER R L.
 PA (PETE/) PETERSEN D M.
 PA (FOUR/) FOURON Y.
 XX Bratzler RL, Petersen DM, Fouron Y;
 PI WPI; 2003-657977/62.
 DR Treating and/or preventing allergy or asthma using an immunostimulatory
 XX nucleic acid alone or in combination with an asthma/allergy medicament.
 PT Claim 10; Page 6; 221pp; English.
 XX
 CC The invention relates to a method of treating or preventing allergy or
 CC asthma which comprises administering to a subject a poly-G nucleic acid
 CC in an aerosol formulation. The methods and compositions of the present
 CC invention are useful for diagnosing and/or treating asthma and allergy
 CC especially in a hypo-responsive subject. The present sequence represents
 CC an immunostimulatory nucleic acid of the invention.
 XX
 XX Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 18.8; DB 1; Length 22;
 Best Local Similarity 90.9%; Pred. No. 8.5e+02;
 Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
 Db ||||| ||||| ||||| ||||| ||||| 1
 22 AAAAAAAAAAAAAAAAAACAAAAA 1
 RESULT 898
 ADG76036/C
 ID ADG76036 standard; DNA; 22 BP.
 XX
 AC ADG76036;
 XX
 DT 11-MAR-2004 (first entry)
 XX
 DE Non-CpG DNA oligonucleotide 37.
 XX
 KW ss; non-CpG; immunostimulatory; non-palindromic; immune response;
 KW proliferation; differentiation; cytokine; antibody production; B-cell;
 KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
 KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
 KW renal cell carcinoma.
 XX
 OS Synthetic.
 XX
 PN WO2003101375-A2.
 XX
 PD 11-DEC-2003.
 XX
 PF 30-MAY-2003; 2003WO-EP005691.
 XX
 PR 30-MAY-2002; 2002CA-02388049.
 XX
 PA (IMMU-) IMMUNOTECH SA.
 XX
 PI Lopez RA;
 XX
 DR WPI; 2004-053333/05.
 XX
 XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 PT acid sequence motif, useful for inducing B-cell activation, treating,
 PT preventing or ameliorating immune system disorder or tumoral disease e.g.
 XX melanoma.
 XX
 PS Example 17; Page 80; 139pp; English.
 XX
 CC This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA

PT preventing or ameliorating immune system disorder or tumoral disease e.g.
 FT melanoma.
 XX
 PS Example 17; Page 81; 139pp; English.
 XX
 CC This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA
 CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primate, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present
 CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoral disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is a non-CpG DNA oligo of the
 CC invention.
 XX
 SQ Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.8; DB 1; Length 22;
 Best Local Similarity 90.9%; Pred. No. 8.5e+02;
 Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
 Db ||||| ||||| ||||| ||||| ||||| 1
 22 AAAAAAAAAAAAAAAAAACAAAAA 1
 RESULT 899
 ADG76002/C
 ID ADG76002 standard; DNA; 22 BP.
 XX
 AC ADG76002;
 XX
 DT 11-MAR-2004 (first entry)
 XX
 DE Non-CpG DNA oligonucleotide 3.
 XX
 KW ss; non-CpG; immunostimulatory; non-palindromic; immune response;
 KW proliferation; differentiation; cytokine; antibody production; B-cell;
 KW plasmacytoid dendritic cell; immunomodulator; gene therapy;
 KW chronic myelogenous leukaemia; melanoma; Kaposi's sarcoma;
 KW renal cell carcinoma.
 XX
 OS Synthetic.
 XX
 PN WO2003101375-A2.
 XX
 PD 11-DEC-2003.
 XX
 PF 30-MAY-2003; 2003WO-EP005691.
 XX
 PR 30-MAY-2002; 2002CA-02388049.
 XX
 PA (IMMU-) IMMUNOTECH SA.
 XX
 PI Lopez RA;
 XX
 DR WPI; 2004-053333/05.
 XX
 XX New immunostimulatory oligonucleotide comprising non-palindromic nucleic
 PT acid sequence motif, useful for inducing B-cell activation, treating,
 PT preventing or ameliorating immune system disorder or tumoral disease e.g.
 XX melanoma.
 XX
 PS Example 17; Page 80; 139pp; English.
 XX
 CC This invention relates to novel immunostimulatory oligonucleotides that
 CC contain a non-palindromic sequence motif. Specifically, it refers to DNA

CC oligonucleotides (without a CpG motif), which can stimulate an immune
 CC response in animals of the order of primate, including humans. The immune
 CC response is characterised by the proliferation, differentiation, cytokine
 CC and antibody production in B-cells, as well as cell differentiation and
 CC cytokine production in plasmacytoid dendritic cells. The present
 CC invention describes immunomodulator compositions that also comprise an
 CC antigen selected from, for example, viruses, bacteria, parasites, tumour
 CC cells and glycolipids. As such, these DNA oligos can be used in gene
 CC therapy for inducing B-cell activation, treating, preventing or
 CC ameliorating an immune system disorder or a tumoural disease including
 CC chronic myelogenous leukaemia, melanoma, Kaposi's sarcoma, and renal cell
 CC carcinoma. This oligonucleotide sequence is a non-CpG DNA oligo of the
 CC invention.

XX
 SQ Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.8; DB 1; Length 22;
 Best Local Similarity 90.9%; Pred. No. 8.5e+02;
 Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
 ||||| ||||| ||||| |||||
 Db 22 AAAAAACAAAAAACAAAAAAA 1

RESULT 900

ADU89377/C
 ID ADU89377 standard; DNA; 22 BP.

AC ADU89377;

XX 10-FEB-2005 (first entry)

DE Allergic response suppressor oligonucleotide #61.

XX ss; antiasthmatic; anti-allergic; dermatological; anti-inflammatory;
 KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
 KW immunostimulator; asthma; rhinitis; urticaria; dermatitis;
 KW bacterial infection; viral infection.

OS Synthetic.

XX US2004235774-A1.

XX 25-NOV-2004.

XX 23-APR-2004; 2004US-00831778.

XX 03-FEB-2000; 2000US-0179991P.

PR 02-FEB-2001; 2001US-00776479.

XX (BRAT/) BRATZLER R L.

PA (PETE/) PETERSEN D M.

PA (FOUR/) FOURON Y.

XX Bratzler RL, Petersen DM, Fouron Y;

XX WPI; 2004-833006/82.

XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic
 PT dermatitis, in a subject, comprises administering a first and second dose
 PT of an immunostimulatory nucleic acid.

XX Disclosure; SEQ ID NO 61; 235pp; English.

XX The invention relates to a method of suppressing a symptom of an allergic
 CC response in a subject by administering a first and second dose of an
 CC immunostimulatory nucleic acid that comprises a nucleotide sequence
 CC comprising 5'-cg-3', and where the second dose is administered from 1 day
 CC to 8 weeks after the first dose. The methods and compositions of the
 CC present invention are useful for the treatment or prevention of asthma
 CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
 CC an immunostimulatory nucleic acid alone or in combination with other

CC medicaments. They can also be used in preventing bacterial and viral
 CC infections. This sequence represents an oligonucleotide used in the
 CC method of the invention.

XX Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.8; DB 1; Length 22;
 Best Local Similarity 90.9%; Pred. No. 8.5e+02;
 Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
 ||||| ||||| ||||| |||||
 Db 22 AAAAAACAAAAAACAAAAAAA 1

RESULT 901

AED74922/C
 ID AED74922 standard; DNA; 22 BP.

XX AED74922;

XX 12-JAN-2006 (first entry)

XX Immunostimulatory oligonucleotide, SEQ ID 55.

XX Immunostimulant; Anti-inflammatory; Antipsoriatic; Gastrointestinal-Gen.;

KW Antulcer; Dermatological; Antiallergic; helper T-lymphocyte;

KW immune stimulation; inflammation; psoriasis; inflammatory bowel disease;

KW Crohn's disease; ulcerative colitis; eczema; skin allergy;

KW contact dermatitis; ss.

XX Synthetic.

XX US2005250726-A1.

XX 10-NOV-2005.

XX 12-MAY-2005; 2005US-00127654.

XX 29-MAR-2001; 2001US-0279642P.

PR 29-MAR-2002; 2002US-00112653.

XX (IOWA) UNIV IOWA RES FOUND.

XX Krieg AM, Berg DJ;

XX WPI; 2005-768014/78.

XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor
 PT to augment T-helper1 cells like immune activation and to treat non-
 PT allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.

XX Disclosure; SEQ ID NO 55; 58pp; English.

XX The present invention relates to a method for augmenting T-helper 1 cells
 CC (Th1)-like immune activation in a subject. The method comprises
 CC administering an immunostimulatory nucleic acid (I) to induce Th1-like
 CC immune activation; and administering a cyclooxygenase inhibitor (II) to
 CC inhibit prostaglandin expression, is new. The present sequence is one
 CC such immunostimulatory nucleic acid. (I) is useful for treating non-
 CC allergic inflammatory diseases such as psoriasis, inflammatory bowel
 CC diseases (Crohn's disease and ulcerative colitis), eczema, allergic
 CC contact dermatitis or latex dermatitis.

XX Sequence 22 BP; 0 A; 0 C; 2 G; 20 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.8; DB 1; Length 22;
 Best Local Similarity 90.9%; Pred. No. 8.5e+02;
 Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2730
 ||||| ||||| ||||| |||||
 Db 22 AAAAAACAAAAAACAAAAAAA 1


```
RESULT 904
ABN59221/c
ID ABN59221 standard; DNA; 60 BP.
XX AC
XX ABN59221;
XX DT
XX 15-JUL-2002 (first entry)
XX DE
XX Human spliced transcript detection oligonucleotide SEQ ID NO:31969.
XX KW
XX Human; mouse; rat; splice transcript; detection; RNA transcript;
XX KW
XX splice variant; transcritome; oligonucleotide library; ss.
XX OS
XX Homo sapiens.
XX PN
XX WO200210449-A2.
XX PD
XX 07-FEB-2002.
XX PF
XX 20-JUL-2001; 2001WO-IB001903.
XX PR
XX 28-JUL-2000; 2000US-0221607P.
XX PR
XX 02-MAY-2001; 2001US-0287724P.
XX PA
XX (COMP-) COMPUGEN INC.
XX PI
XX Shoshan A, Wasserman A, Mintz E, Mintz L, Faigler S;
XX WI
XX PI; 2002-257383/30.
XX PT
XX New oligonucleotide libraries comprising oligonucleotides which
XX PT
XX selectively hybridize to mRNAs transcribed from a transcription unit of a
XX PT
XX genome, useful for detecting tissue-, pathology-, and developmental-
XX PT
XX specific genes.
XX PS
XX Example 1; SEQ ID NO 31969; 47pp; English.
XX CC
XX The present invention describes oligonucleotide libraries for detecting
XX CC
XX messenger RNAs that populate a (sub-)transcriptome, where the (sub-
XX CC
XX )transcriptome comprises messenger RNAs transcribed from multiple
XX CC
XX transcription units that populate a genome. The library comprises several
XX CC
XX oligonucleotides, each capable of hybridizing selectively to a set of
XX CC
XX messenger RNAs transcribed from a given transcription unit of the genome,
XX CC
XX which encodes one or more messenger RNA splice variants. The
XX CC
XX oligonucleotide libraries are useful for detecting mRNAs from a
XX CC
XX biological sample, in expression profiling studies, in qualitatively or
XX CC
XX quantitatively characterising the corresponding transcriptome, and in
XX CC
XX detecting RNA transcripts and splice variants of human or animal
XX CC
XX transcriptomes. The libraries may also be used as specialised mini
XX CC
XX libraries to detect transcripts of a sub-transcriptome under a particular
XX CC
XX biological or pathological state, and so allowing the detection of tissue
XX CC
XX - and pathology-specific genes such as those genes only expressed in
XX CC
XX specific tissue under a specific pathological condition; to detect
XX CC
XX developmental specific genes; and to detect RNA transcripts and splice
XX CC
XX variants of a transcriptome of a patient suffering from a particular
XX CC
XX disorder. ABN27253 to ABN59589 represent oligonucleotide sequences from
XX CC
XX rats, humans and mice, which are used in the exemplification of the
XX CC
XX present invention. N.B. The sequence data for this patent did not form
XX CC
XX part of the printed specification, but was obtained in electronic format
XX CC
XX directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX SQ
XX Sequence 60 BP; 17 A; 16 C; 18 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.6; DB 1; Length 60;
XX Best Local Similarity 57.9%; Pred. No. 9.7e+02;
XX Matches 33; Conservative 0; Mismatches 24; Indels 0; Gaps 0;
XX
XX QY 2361 GCAAGGTACGCTGGGCAAGTTCACGTGTCGCCATGCTGAAGAGCGCTCGCGGCTT 2417
XX ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
XX Db 60 GCATGGGCACAGTGAACCTGCCAGCGTACCTCTGCTGATGTGGTCTTCAGCTCCT 4
XX
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RESULT 905
AAQ75569/c
ID AAQ75569 standard; DNA; 20 BP.
XX AC
XX AAQ75569;
XX DT
XX 04-AUG-1995 (first entry)
XX DE
XX Reverse transcription primer used in cDNA analysis technique.
XX KW
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW
XX aggregate; restriction enzyme; ss.
XX OS
XX Synthetic.
XX PN
XX JP06303997-A.
XX PD
XX 01-NOV-1994.
XX PF
XX 16-APR-1993; 93JP-00112515.
XX PR
XX 16-APR-1993; 93JP-00112515.
XX PA
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR
XX WPI; 1995-018287/03.
XX PT
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT
XX by digestion with restriction enzymes.
XX PS
XX Disclosure; Page 5; 11pp; Japanese.
XX CC
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC
XX and using the aggregate of mRNAs as the template for each reverse
XX CC
XX transcription primer; (b) digesting each of the prepared aggregates of
XX CC
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX CC
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC
XX method can be used to analyse gene expression rapidly and easily
XX SQ
XX Sequence 20 BP; 0 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 8.6e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
XX ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
XX Db 20 AACAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 906
AAQ75584/c
ID AAQ75584 standard; DNA; 20 BP.
XX AC
XX AAQ75584;
XX DT
XX 04-AUG-1995 (first entry)
XX DE
XX Reverse transcription primer used in cDNA analysis technique.
XX KW
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW
XX aggregate; restriction enzyme; ss.
XX OS
XX Synthetic.
XX PN
XX JP06303997-A.
XX PD
XX 01-NOV-1994.
XX PF
XX 16-APR-1993; 93JP-00112515.
XX
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PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 2 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2708 TAAAAAATAAAAAAAAAAAAAA 2727
Db 20 TATAAAAAAAAAAAAAAAAAAAAA 1
RESULT 907
AAQ75585/c
ID AAQ75585 standard; DNA; 20 BP.
XX AC AAQ75585;
XX
DT 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 0 C; 0 G; 19 T; 0 U; 0 Other;

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Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2706 ACTAAAAAATAAAAAAAAAA 2725
Db 20 AATAAAAAAAAAAAAAAAAAAAAA 1
RESULT 908
AAQ75579/c
ID AAQ75579 standard; DNA; 20 BP.
XX AC AAQ75579;
XX
DT 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2707 CTAATAAAAAAAAAAAAAAAAA 2726
Db 20 CTTAAAAAATAAAAAAAAAAAAA 1
RESULT 909
AAQ75563/c
ID AAQ75563 standard; DNA; 20 BP.
XX AC AAQ75563;
XX
DT 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;

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KW aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 1 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 8.6e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 2707 CTAAAAAAAAAAAAAAAAAAAA 2726
XX ||| ||||| ||||| |||||
XX 20 CTCAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 910
XX AAQ75568/C
XX ID AAQ75568 standard; DNA; 20 BP.
XX AC AAQ75568;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 1 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 8.6e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 2707 TACTAAAAAAAAAAAAAAAAAAAA 2724
XX ||| ||||| ||||| |||||
XX 20 TACAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 911
XX AAQ75589/C
XX ID AAQ75589 standard; DNA; 20 BP.
XX AC AAQ75589;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 8.6e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 2705 TACTAAAAAAAAAAAAAAAAAAAA 2724
XX ||| ||||| ||||| |||||
XX 20 TACAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 912
XX ACTAAAAAAAAAAAAAAAAAAAAA 2725
XX ||| ||||| ||||| |||||
XX 20 AGTAAAAAAAAAAAAAAAAAAAAA 1
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 8.6e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2725
XX ||| ||||| ||||| |||||
XX 20 AGTAAAAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 912

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AAQ75593/c
ID AAQ75593 standard; DNA; 20 BP.
XX
AC AAQ75593;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2706 ACTAAAAA 2725
Db 20 ACCAAAAA 1

RESULT 913
AAQ75561/c
ID AAQ75561 standard; DNA; 20 BP.
XX
AC AAQ75561;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2706 ACTAAAAA 2725
Db 20 ACCAAAAA 1

RESULT 914
AAQ75601/c
ID AAQ75601 standard; DNA; 20 BP.
XX
AC AAQ75601;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

```

```

XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2706 ACTAAAAA 2725
Db 20 ACCAAAAA 1

RESULT 914
AAQ75601/c
ID AAQ75601 standard; DNA; 20 BP.
XX
AC AAQ75601;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

```


CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2726
 |||||
 Db 20 CTGAAAAAATAAAAAAAAAA 1

RESULT 918

AAT04917/c
 ID AAT04917 standard; cDNA; 20 BP.

AC AAT04917;

XX 25-MAR-2003 (revised)
 DT 15-MAY-1996 (first entry)

XX Mammalian stem cell factor (SCF) cDNA oligonucleotide primer 220-3.

XX Stem cell factor; progenitor; haematopoiesis; SCF; anaemia;
 KW thrombocytopenia; leucopenia; AIDS; immunodeficiency; bone graft;
 KW transplant; neoplasia; myelosuppression; bone marrow; ss.

XX Synthetic.

XX EP676470-A1.

XX 11-OCT-1995.

XX 04-OCT-1990; 95EP-00105391.

XX 16-OCT-1989; 89US-00422383.

XX 11-JUN-1990; 90US-00537198.

XX 24-AUG-1990; 90US-00573616.

XX 28-SEP-1990; 90WO-US005548.

XX 01-OCT-1990; 90US-00589701.

PA (AMGE-) AMGEN INC.

PI Zeebo KM, Suggs SV, Bosselman RA, Martin FH;

XX WPI; 1995-346090/45.

PT New stem cell factor polypeptide(s) - for stimulating the growth of
 PT primitive progenitor cells, esp. for treating disorders involving blood
 PT cells.

XX Example 3; Fig 12C; 127pp; English.

XX AAT04915-T04922 are oligonucleotide primers and probes used for the
 CC amplification and sequencing of mammalian stem cell factor (SCF). Non-
 CC naturally occurring SCF and C-terminally truncated polypeptides, having
 CC amino acid sequences sufficiently duplicative of naturally occurring SCF,
 CC stimulate growth of primitive progenitors such as haematopoietic
 CC progenitor cells, neural stem cells and primordial germ stem cells. The
 CC peptides can be used in a composition for treating leucopenia, anaemia or
 CC thrombocytopenia, for enhancing engraftment of bone marrow during
 CC transplantation or for bone marrow recovery after chemotherapy or
 CC radiation-induced bone marrow aplasia or myelosuppression. They can also
 CC be used for treating neoplasia, nerve damage, infertility, intestinal
 CC damage or myeloproliferative disorders. Antibodies may be raised against
 CC the peptides for use in detection or neutralisation of SCF in serum. SCF

CC may be useful for the treatment of AIDS and severe combined
 CC immunodeficiency (SCID) states alone or in combination with other factors
 CC such as IL-7. (Updated on 25-MAR-2003 to correct PF field.)

XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2726
 |||||
 Db 20 CTGAAAAAATAAAAAAAAAA 1

RESULT 919

AAT04918/c
 ID AAT04918 standard; cDNA; 20 BP.

AC AAT04918;

XX 25-MAR-2003 (revised)
 DT 15-MAY-1996 (first entry)

XX Mammalian stem cell factor (SCF) cDNA oligonucleotide primer 220-11.

XX Stem cell factor; progenitor; haematopoiesis; SCF; anaemia;
 KW thrombocytopenia; leucopenia; AIDS; immunodeficiency; bone graft;
 KW transplant; neoplasia; myelosuppression; bone marrow; ss.

XX Synthetic.

XX EP676470-A1.

XX 11-OCT-1995.

XX 04-OCT-1990; 95EP-00105391.

XX 16-OCT-1989; 89US-00422383.

XX 11-JUN-1990; 90US-00537198.

XX 24-AUG-1990; 90US-00573616.

XX 28-SEP-1990; 90WO-US005548.

XX 01-OCT-1990; 90US-00589701.

PA (AMGE-) AMGEN INC.

PI Zeebo KM, Suggs SV, Bosselman RA, Martin FH;

XX WPI; 1995-346090/45.

PT New stem cell factor polypeptide(s) - for stimulating the growth of
 PT primitive progenitor cells, esp. for treating disorders involving blood
 PT cells.

XX Example 3; Fig 12C; 127pp; English.

XX AAT04915-T04922 are oligonucleotide primers and probes used for the
 CC amplification and sequencing of mammalian stem cell factor (SCF). Non-
 CC naturally occurring SCF and C-terminally truncated polypeptides, having
 CC amino acid sequences sufficiently duplicative of naturally occurring SCF,
 CC stimulate growth of primitive progenitors such as haematopoietic
 CC progenitor cells, neural stem cells and primordial germ stem cells. The
 CC peptides can be used in a composition for treating leucopenia, anaemia or
 CC thrombocytopenia, for enhancing engraftment of bone marrow during
 CC transplantation or for bone marrow recovery after chemotherapy or
 CC radiation-induced bone marrow aplasia or myelosuppression. They can also
 CC be used for treating neoplasia, nerve damage, infertility, intestinal
 CC damage or myeloproliferative disorders. Antibodies may be raised against
 CC the peptides for use in detection or neutralisation of SCF in serum. SCF
 CC may be useful for the treatment of AIDS and severe combined
 CC immunodeficiency (SCID) states alone or in combination with other factors
 CC such as IL-7. (Updated on 25-MAR-2003 to correct PF field.)

XX

```

CC oligonucleotide which is used in an example from the present invention
XX
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
    Query Match 0.7%; Score 18.4; DB 1; Length 20;
    Best Local Similarity 95.0%; Pred. No. 8.6e+02;
    Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAAAGAAAAA 2726
DB 20 CCAAAAAA 1
RESULT 921
AAAL3754/c
ID - AAAL3754 standard; DNA; 20 BP.
XX AC AAAL3754;
XX DT 27-JUL-2000 (first entry)
XX DE Stem cell factor universal oligonucleotide 220-11.
XX DE Stem cell factor; SCF; haematopoietic progenitor cell; blood forming;
XX KW primitive progenitor cell; haematopoietic disorder; syngeneic;
XX KW allogeneic; autologous bone marrow transplant; gene therapy;
XX KW transfection; haematopoietic stem cell; acute blood loss; neoplasia;
XX KW cancer; ss.
XX OS Synthetic.
XX XX
XX PN EP92579-A1.
XX PD 12-APR-2000.
XX PF 04-OCT-1990; 99EP-0012861.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 28-SEP-1990; 90WO-US000548.
XX PR 01-OCT-1990; 90US-00589701.
XX PR 04-OCT-1990; 90EP-00310899.
XX PA (AMGE-) AMGEN INC.
XX PI Zeebo KM, Suggs SV, Bosselmann RA, Martin FH;
XX WPI; 2000-259135/23.
XX
XX PT Production of hematopoietic cells suitable for administration to a
XX PT subject using progenitor cells and expanding the cells using stem cell
XX PT factor.
XX
XX Example 3; Fig 12C; 123pp; English.
XX
XX A method has been developed of making haematopoietic cells suitable for
XX administration to a subject. The method comprises: (a) obtaining
XX haematopoietic progenitor cells from a donor; and (b) expanding the cells
XX by adding to the cells a haematopoietically effective dose of a
XX polypeptide product having at least part of the biological properties of naturally
XX confirmation and one or more of the biological properties of naturally
XX occurring stem cell factor (SCF). The method is useful for stimulating
XX primitive progenitor cells including early haematopoietic progenitor
XX cells which are capable of maturing to erythroid, megakaryocyte,
XX granulocyte, lymphocyte and macrophage cells. SCF results in absolute
XX increases in haematopoietic cells of both myeloid and lymphoid lineages.
XX SCF is useful for treating haematopoietic disorders. The method is useful
XX for expanding early haematopoietic progenitors in syngeneic, allogeneic
XX or autologous bone marrow transplant. SCF is useful for enhancing the
XX efficiency of gene therapy based on transfecting haematopoietic stem
XX cells. SCF is also useful for combating the myelosuppressive effects of
XX anti-HIV drugs such as AZT and for enhancing haematopoietic recovery

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RESULT 924
AAS04113/C
ID AAS04113 standard; DNA; 20 BP.
XX
XX
AC AAS04113;
XX
XX
DT 29-AUG-2001 (first entry)
XX
DE Human SCF (stem cell factor) cDNA universal PCR primer 220-11.
XX
XX Human; stem cell factor; SCF; early haematopoietic progenitor cell;
KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
KW PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX US6207417-B1.
PN
XX
XX 27-MAR-2001.
PD
XX
XX 07-JUN-1995; 95US-00482918.
PF
XX
XX 16-OCT-1989; 89US-00422383.
PR
XX 11-JUN-1990; 90US-00537198.
PR
XX 24-AUG-1990; 90US-00573616.
PR
XX 01-OCT-1990; 90US-00589701.
PR
XX 21-DEC-1993; 93US-00172329.
XX
XX (ZSEB/) ZSEBO K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI WPI; 2001-298941/31.
XX
XX Novel nucleic acids encoding stem cell factor useful for treating
PT disorders involving blood cells, e.g. leukemia, splenomegaly, Hodgkin's
PT disease, Kala azar, anemia and septicemia.
XX
XX Example 3; Fig 12C; 209pp; English.
PS
XX The present sequence for universal PCR primer 220-11 is 1 of 8 universal
CC oligonucleotides (AAS04110-AAS04117) used in the isolation of the human
CC SCF (stem cell factor) cDNA sequence. The present invention relates to
CC novel stem cell factors (AAU02453-AAU02458, AAU02460, AAU02461) and the
CC novel stem cell factors (AAU02453-AAU02458, AAU02460, AAU02461) and the
CC polynucleotides encoding them. SCF stimulate primitive progenitor cells
CC including early haematopoietic progenitor cells. The invention also
CC describes SCF peptides (AAU02462-AAU02481) and the oligonucleotides
CC (AAS04081-AAS04117) used in the isolation of human and rat SCF sequences.
CC The polynucleotide encoding SCF is useful for producing SCF and useful in
CC gene therapy. It is useful for treating disorders involving blood cells
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12
CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
CC disorders such as piebaldism and vitiligo
XX
XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2726
DB 20 CGAAAAAAAAAAAAAAAAAAAA 1

RESULT 926

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```

RESULT 925
AAS04111/C
ID AAS04111 standard; DNA; 20 BP.
XX
XX
AC AAS04111;
XX
XX
DT 29-AUG-2001 (first entry)
XX
DE Human SCF (stem cell factor) cDNA universal PCR primer 220-3.
XX
XX Human; stem cell factor; SCF; early haematopoietic progenitor cell;
KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
KW PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX US6207417-B1.
PN
XX
XX 27-MAR-2001.
PD
XX
XX 07-JUN-1995; 95US-00482918.
PF
XX
XX 16-OCT-1989; 89US-00422383.
PR
XX 11-JUN-1990; 90US-00537198.
PR
XX 24-AUG-1990; 90US-00573616.
PR
XX 01-OCT-1990; 90US-00589701.
PR
XX 21-DEC-1993; 93US-00172329.
XX
XX (ZSEB/) ZSEBO K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI WPI; 2001-298941/31.
XX
XX Novel nucleic acids encoding stem cell factor useful for treating
PT disorders involving blood cells, e.g. leukemia, splenomegaly, Hodgkin's
PT disease, Kala azar, anemia and septicemia.
XX
XX Example 3; Fig 12C; 209pp; English.
PS
XX The present sequence for universal PCR primer 220-3 is 1 of 8 universal
CC oligonucleotides (AAS04110-AAS04117) used in the isolation of the human
CC SCF (stem cell factor) cDNA sequence. The present invention relates to
CC novel stem cell factors (AAU02453-AAU02458, AAU02460, AAU02461) and the
CC polynucleotides encoding them. SCF stimulate primitive progenitor cells
CC including early haematopoietic progenitor cells. The invention also
CC describes SCF peptides (AAU02462-AAU02481) and the oligonucleotides
CC (AAS04081-AAS04117) used in the isolation of human and rat SCF sequences.
CC The polynucleotide encoding SCF is useful for producing SCF and useful in
CC gene therapy. It is useful for treating disorders involving blood cells
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12
CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
CC disorders such as piebaldism and vitiligo
XX
XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2726
DB 20 CCAAAAAAAAAAAAAAAAAA 1

RESULT 926

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AAAF89091/c
ID  AA89091 standard; DNA; 20 BP.
XX
AC  AA89091;
XX
DT  13-JUL-2001 (first entry)
XX
DE  Mammalian stem cell factor PCR primer SEQ ID NO: 32.
XX
KW  Human; rat; mammal; stem cell factor; SCF; cell growth stimulation;
KW  gene therapy; haematopoietic disorder; aplastic anaemia; leukaemia;
KW  neurological damage; intestinal damage; infertility; AIDS; SCID;
KW  severe combined immunodeficiency; PCR primer; ss.
XX
OS  Mammalia.
XX
PN  US6207802-B1.
XX
PD  27-MAR-2001.
XX
PF  09-NOV-1994; 94US-00336728.
XX
PR  16-OCT-1989; 89US-00422383.
XX  11-JUN-1990; 90US-00537198.
XX  24-AUG-1990; 90US-00573616.
XX  01-OCT-1990; 90US-00589701.
XX  25-NOV-1992; 92US-00982255.
XX
PA  (AMGE-) AMGEN INC.
XX
PI  Zsebo KM, Bosseelman RA, Suggs SV, Martin FH;
XX  WPI; 2001-353108/37.
XX
PT  Novel isolated non-human mammalian stem cell factor polypeptide
PT  stimulating growth of early hematopoietic progenitor cells, useful for
PT  treating aplastic anemia, lymphoma, Letterer-Siwe disease, Kala azar,
PT  sarcoidosis.
XX
PS  Example 3; Fig 12C; 209pp; English.
XX
CC  The present invention provides the protein and coding sequences of
CC  mammalian stem cell factors (SCFs). These are capable of stimulating the
CC  growth of early haematopoietic progenitor cells, neural stem cells and
CC  primordial germ stem cells. The sequences are useful in the treatment of
CC  leukaemias, haematopoietic disorders, aplastic anaemia, paroxysmal
CC  nocturnal haemoglobinuria, malaria, pigmentation disorders, neurological
CC  and intestinal damage, infertility, AIDS and severe combined
CC  immunodeficiency (SCID). The present sequence is primer used to amplify
CC  an SCF in the exemplification of the invention
XX
SQ  Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match      0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY  2707 CTAAAGAAAAA 2726
    | | | | | | | | | | | | | | | | | | | |
DB  20 CGAAGAAAAA 1

RESULT 927
AA89093/c
ID  AA89093 standard; DNA; 20 BP.
XX
AC  AA89093;
XX
DT  13-JUL-2001 (first entry)
XX
DE  Mammalian stem cell factor PCR primer SEQ ID NO: 34.
XX
KW  Human; rat; mammal; stem cell factor; SCF; cell growth stimulation;

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KW  gene therapy; haematopoietic disorder; aplastic anaemia; leukaemia;
KW  neurological damage; intestinal damage; infertility; AIDS; SCID;
KW  severe combined immunodeficiency; PCR primer; ss.
XX
OS  Mammalia.
XX
PN  US6207802-B1.
XX
PD  27-MAR-2001.
XX
PF  09-NOV-1994; 94US-00336728.
XX
PR  16-OCT-1989; 89US-00422383.
XX  11-JUN-1990; 90US-00537198.
XX  24-AUG-1990; 90US-00573616.
XX  01-OCT-1990; 90US-00589701.
XX  25-NOV-1992; 92US-00982255.
XX
PA  (AMGE-) AMGEN INC.
XX
PI  Zsebo KM, Bosseelman RA, Suggs SV, Martin FH;
XX  WPI; 2001-353108/37.
XX
PT  Novel isolated non-human mammalian stem cell factor polypeptide
PT  stimulating growth of early hematopoietic progenitor cells, useful for
PT  treating aplastic anemia, lymphoma, Letterer-Siwe disease, Kala azar,
PT  sarcoidosis.
XX
PS  Example 3; Fig 12C; 209pp; English.
XX
CC  The present invention provides the protein and coding sequences of
CC  mammalian stem cell factors (SCFs). These are capable of stimulating the
CC  growth of early haematopoietic progenitor cells, neural stem cells and
CC  primordial germ stem cells. The sequences are useful in the treatment of
CC  leukaemias, haematopoietic disorders, aplastic anaemia, paroxysmal
CC  nocturnal haemoglobinuria, malaria, pigmentation disorders, neurological
CC  and intestinal damage, infertility, AIDS and severe combined
CC  immunodeficiency (SCID). The present sequence is primer used to amplify
CC  an SCF in the exemplification of the invention
XX
SQ  Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match      0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY  2707 CTAAAGAAAAA 2726
    | | | | | | | | | | | | | | | | | | | |
DB  20 CGAAGAAAAA 1

RESULT 928
AA89093/c
ID  AA89093 standard; DNA; 20 BP.
XX
AC  AA89093;
XX
DT  07-AUG-2001 (first entry)
XX
DE  Human SCF (stem cell factor) cDNA universal PCR primer 220-3.
XX
KW  Human; stem cell factor; SCF; early haematopoietic progenitor cell;
KW  blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
KW  anaemia; Kala azar; septicaemia; malaria; hypopigmentation disorder;
KW  PCR primer; ss.
XX
OS  Homo sapiens.
XX
PN  US6204363-B1.
XX
PD  20-MAR-2001.
XX

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PF 25-NOV-1992; 92US-00982255.
XX
PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2001-256683/26.
XX
XX New stem cell factor polypeptides and their analogs which stimulate
PT growth of early hematopoietic progenitors, useful for treating aplastic
PT anemia, carcinoma, multiple myeloma, vitiligo, kala azar, Hodgkin's
PT disease.
XX
XX Example 3; Fig 12C; 166pp; English.
XX
XX The present sequence for universal PCR primer 220-3 is 1 of 8 universal
CC oligonucleotides (AAH23888-AAH23895) used in the isolation of the human
CC SCF (stem cell factor) cDNA sequence. The present invention relates to
CC novel stem cell factors (AAB73561-AAB73568, AAB73571-AAB73576) and the
CC polynucleotides encoding them. SCF stimulate primitive progenitor cells
CC including early haematopoietic progenitor cells. The invention also
CC describes SCF peptides (AAB73578-AAB73597) and the oligonucleotides
CC (AAH23859-AAH23887) used in the isolation of human and rat SCF sequences.
CC The polynucleotide encoding SCF is useful for producing SCF and useful in
CC gene therapy. It is useful for treating disorders involving blood cells
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
CC congestive splenomegaly, kala azar, sarcoidosis, military tuberculosis,
CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin
CC B12 and folic acid deficiency, pyridoxine deficiency, and
CC hypopigmentation disorders such as piebaldism and vitiligo
XX
XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAA...AAAAAAAAA 2726
Db 20 CCAAAAA...AAAAAAAAA 1

RESULT 929
AAH23891/c
ID AAH23891 standard; DNA; 20 BP.
XX
XX AAH23891;
XX
XX 07-AUG-2001 (first entry)
XX Human SCF (stem cell factor) cDNA universal PCR primer 220-11.
XX
XX Human; stem cell factor; SCF; early haematopoietic progenitor cell;
KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
KW anaemia; kala azar; septicemia; malaria; hypopigmentation disorder;
KW PCR primer; ss.
XX
XX Homo sapiens.
XX
XX US6204363-B1.
XX
XX 20-MAR-2001.
XX
XX 25-NOV-1992; 92US-00982255.
XX
XX 16-OCT-1989; 89US-00422383.
PR

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PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2001-256683/26.
XX
XX New stem cell factor polypeptides and their analogs which stimulate
PT growth of early hematopoietic progenitors, useful for treating aplastic
PT anemia, carcinoma, multiple myeloma, vitiligo, kala azar, Hodgkin's
PT disease.
XX
XX Example 3; Fig 12C; 166pp; English.
XX
XX The present sequence for universal PCR primer 220-11 is 1 of 8 universal
CC oligonucleotides (AAH23888-AAH23895) used in the isolation of the human
CC SCF (stem cell factor) cDNA sequence. The present invention relates to
CC novel stem cell factors (AAB73561-AAB73568, AAB73571-AAB73576) and the
CC polynucleotides encoding them. SCF stimulate primitive progenitor cells
CC including early haematopoietic progenitor cells. The invention also
CC describes SCF peptides (AAB73578-AAB73597) and the oligonucleotides
CC (AAH23859-AAH23887) used in the isolation of human and rat SCF sequences.
CC The polynucleotide encoding SCF is useful for producing SCF and useful in
CC gene therapy. It is useful for treating disorders involving blood cells
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
CC congestive splenomegaly, kala azar, sarcoidosis, military tuberculosis,
CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin
CC B12 and folic acid deficiency, pyridoxine deficiency, and
CC hypopigmentation disorders such as piebaldism and vitiligo
XX
XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAA...AAAAAAAAA 2726
Db 20 CCAAAAA...AAAAAAAAA 1

RESULT 930
AAS04214/c
ID AAS04214 standard; DNA; 20 BP.
XX
XX AAS04214;
XX
XX 29-AUG-2001 (first entry)
XX Human SCF (stem cell factor) cDNA universal PCR primer 220-11.
XX
XX Human; stem cell factor; SCF; early haematopoietic progenitor cell;
KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
KW anaemia; kala azar; septicemia; malaria; hypopigmentation disorder;
KW PCR primer; ss.
XX
XX Homo sapiens.
XX
XX US6218148-B1.
XX
XX 17-APR-2001.
XX
XX 21-DEC-1993; 93US-00172329.
XX
XX 16-OCT-1989; 89US-00422383.
PR
XX 11-JUN-1990; 90US-00537198.
PR
XX 24-AUG-1990; 90US-00573616.
PR
XX 01-OCT-1990; 90US-00589701.
PR

```

```

PR 25-NOV-1992; 92US-00982255.
XX (AMGE-) AMGEN INC.
XX
PI Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
XX
XX WPI; 2001-281051/29.
XX
XX Isolated DNA sequence, encoding polypeptide product useful for
PT stimulating growth of early hematopoietic progenitor cells.
XX
XX Example 3; Fig 12C; 167pp; English.
XX
XX The present sequence for universal PCR primer 220-11 is 1 of 8 universal
CC oligonucleotides (AAS04211-AAS04218) used in the isolation of the human
CC SCF (stem cell factor) cDNA sequence. The present invention relates to
CC novel stem cell factors (AAU02761-AAU02767, AAU02770-AAU02775, AAU02797)
CC and the polynucleotides encoding them. SCF stimulate primitive progenitor
CC cells including early hematopoietic progenitor cells. The invention also
CC describes SCF peptides (AAU02777-AAU02794) and the oligonucleotides
CC (AAS04182-AAS04210) used in the isolation of human and rat SCF sequences.
CC The polynucleotide encoding SCF is useful for producing SCP and useful in
CC gene therapy. It is useful for treating disorders involving blood cells
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12
CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
CC disorders such as piebaldism and vitiligo
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2707 CTAATAAAAAAAAAAAAAA 2726
Db 20 CGAAAAAAAAAAAAAAAAAAAA 1

RESULT 931
AAS04212/C
ID AAS04212 standard; DNA; 20 BP.
XX
XX AAS04212;
XX
XX 29-AUG-2001 (first entry)
XX
XX Human SCF (stem cell factor) cDNA universal PCR primer 220-3.
XX
XX Human; stem cell factor; SCF; early hematopoietic progenitor cell;
KW blood disorder; leukaemia; Hodgkin's disease; lymphoma; splenomegaly;
KW anaemia; Kala azar; septicemia; malaria; hypopigmentation disorder;
KW PCR primer; ss.
XX
XX Homo sapiens.
XX
XX US6218148-B1.
XX
XX 17-APR-2001.
XX
XX 21-DEC-1993; 93US-00172329.
XX
XX 16-OCT-1989; 89US-00422383.
XX 11-JUN-1990; 90US-00537198.
XX 24-AUG-1990; 90US-00573616.
XX 01-OCT-1990; 90US-00589701.
XX 10-APR-1991; 91US-00684535.
XX 25-NOV-1992; 92US-00982255.
XX (AMGE-) AMGEN INC.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI
XX

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```

XX WPI; 2001-281051/29.
XX
XX Isolated DNA sequence, encoding polypeptide product useful for
PT stimulating growth of early hematopoietic progenitor cells.
XX
XX Example 3; Fig 12C; 167pp; English.
XX
XX The present sequence for universal PCR primer 220-3 is 1 of 8 universal
CC oligonucleotides (AAS04211-AAS04218) used in the isolation of the human
CC SCF (stem cell factor) cDNA sequence. The present invention relates to
CC novel stem cell factors (AAU02761-AAU02767, AAU02770-AAU02775, AAU02797)
CC and the polynucleotides encoding them. SCF stimulate primitive progenitor
CC cells including early hematopoietic progenitor cells. The invention also
CC describes SCF peptides (AAU02777-AAU02794) and the oligonucleotides
CC (AAS04182-AAS04210) used in the isolation of human and rat SCF sequences.
CC The polynucleotide encoding SCF is useful for producing SCP and useful in
CC gene therapy. It is useful for treating disorders involving blood cells
CC such as myelofibrosis, metastatic carcinoma, acute leukaemia, multiple
CC myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, anaemia,
CC congestive splenomegaly, Kala azar, sarcoidosis, military tuberculosis,
CC disseminated fungus disease, Fulminating septicemia, malaria, vitamin B12
CC and folic acid deficiency, pyridoxine deficiency, and hypopigmentation
CC disorders such as piebaldism and vitiligo
XX
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2707 CTAATAAAAAAAAAAAAAA 2726
Db 20 CCAAAAAAAAAAAAAAAAAA 1

RESULT 932
AAS10447/C
ID AAS10447 standard; DNA; 20 BP.
XX
XX AAS10447;
XX
XX 24-OCT-2001 (first entry)
XX
XX Human stem cell factor (SCF) cDNA universal PCR primer 220-3.
XX
XX Human; stem cell factor; SCF; hematopoietic progenitor cell;
KW blood disorder; Hodgkin's disease; vitamin B12; folic acid deficiency;
KW hypopigmentation disorder; viral disorder; AIDS; PCR primer; ss.
XX
XX Homo sapiens.
XX
XX US6248319-B1.
XX
XX 19-JUN-2001.
XX
XX 24-MAY-1995; 95US-00449653.
XX
XX 16-OCT-1989; 89US-00422383.
XX 11-JUN-1990; 90US-00537198.
XX 24-AUG-1990; 90US-00573616.
XX 01-OCT-1990; 90US-00589701.
XX 10-APR-1991; 91US-00684535.
XX 25-NOV-1992; 92US-00982255.
XX 21-DEC-1993; 93US-00172329.
XX (ZSEB/) ZSEBO K M.
XX (BOSS/) BOSSELMAN R A.
XX (SUGG/) SUGGS S V.
XX (MART/) MARTIN F H.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI
XX

```


PT treating leucopenia, thrombocytopenia, anemia and for enhancing
 PT engraftment of bone marrow during transplantation in a mammal.
 XX
 PS Example 3; Fig 12C; 217pp; English.
 XX
 CC The present invention relates to novel non-naturally-occurring stem cell
 CC factor (SCF) polypeptides having an amino acid sequence sufficiently
 CC duplicative of that of naturally-occurring SCF to allow possession of
 CC haematopoietic biological activity of naturally occurring SCF. Sequences
 CC of the invention are useful for treating leucopaenia, thrombocytopenia,
 CC anaemia and for enhancing bone marrow recovery in treatment of radiation,
 CC or chemotherapeutic induced bone marrow aplasia or myelosuppression. They
 CC are also useful for treating acquired immune deficiency in a human, nerve
 CC damage, neoplasia, infertility, myeloproliferative disorder, intestinal
 CC damage in a mammal. SCF sequences are useful for preparing biologically
 CC active polymer polypeptide adduct, for enhancing transfection of early
 CC haematopoietic progenitor cells with a gene, and transfer of a gene into
 CC a mammal. They are useful for treating myelofibrosis, myelosclerosis,
 CC osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma,
 CC Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease,
 CC Letterer-Siwe disease, refractory erythroblastic anaemia, Di Guglielmo
 CC syndrome, congestive splenomegaly, Kala azar, sarcoidosis, primary
 CC splenic pancytopenia, disseminated fungus disease, malaria, military
 CC tuberculosis, Fulminating septicaemia, pyridoxine deficiency, vitamin B12
 CC and folic acid deficiency, Diamond Blackfan anaemia, hypopigmentation
 CC disorders such as piebaldism, AIDS (acquired immune deficiency syndrome)
 CC and vitiligo. The present sequence is a PCR primer which is used for
 CC amplifying the 5' end of rat SCF cDNA. This sequence is used in the
 CC exemplification of the invention
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAGAAAAA 2726
 DB 20 CCAAGAAAAA 1
 RESULT 935
 AAD35466/c
 ID AAD35466 standard; DNA; 20 BP.
 XX
 AC AAD35466;
 XX
 DT 25-JUL-2002 (first entry)
 XX
 DE Rat SCF 5' cDNA amplifying PCR primer, 220-11.
 XX
 KW Rat; stem cell factor; SCF protein; leucopaenia; thrombocytopenia;
 KW anaemia; myelosuppression; nerve damage; myeloproliferative disorder;
 KW infertility; neoplasia; myelofibrosis; myelosclerosis; osteopetrosis;
 KW metastatic carcinoma; acute leukaemia; multiple myeloma; sarcoidosis;
 KW Hodgkin's disease; lymphoma; Gaucher's disease; Niemann-Pick disease;
 KW Letterer-Siwe disease; refractory erythroblastic anaemia; Kala azar;
 KW Di Guglielmo syndrome; congestive splenomegaly; splenic pancytopenia;
 KW disseminated fungus disease; Fulminating septicaemia; piebaldism; AIDS;
 KW acquired immune deficiency syndrome; malaria; military tuberculosis;
 KW pyridoxine deficiency; vitamin B12 deficiency; folic acid deficiency;
 KW Diamond Blackfan anaemia; hypopigmentation disorder; vitiligo; PCR;
 KW primer; ss.
 XX
 OS Rattus sp.
 XX
 PN US2002018763-A1.
 XX
 PD 14-FEB-2002.
 XX
 PF 12-JAN-1998; 98US-00005243.
 XX

PR 24-MAY-1995; 95US-00449653.
 XX
 PA (ZSEB/) ZSEBO K M.
 PA (BOSS/) BOSSELMAN R A.
 PA (SUGG/) SUGGS S V.
 PA (MART/) MARTIN F H.
 XX
 PI Zsebo KM, Bosseelman RA, Suggs SV, Martin FH;
 XX WPI; 2002-350789/38.
 DR
 XX Novel non-naturally-occurring stem cell factor polypeptide, useful for
 PT treating leucopenia, thrombocytopenia, anemia and for enhancing
 PT engraftment of bone marrow during transplantation in a mammal.
 XX
 PS Example 3; Fig 12C; 217pp; English.
 XX
 CC The present invention relates to novel non-naturally-occurring stem cell
 CC factor (SCF) polypeptides having an amino acid sequence sufficiently
 CC duplicative of that of naturally-occurring SCF to allow possession of
 CC haematopoietic biological activity of naturally occurring SCF. Sequences
 CC of the invention are useful for treating leucopaenia, thrombocytopenia,
 CC anaemia and for enhancing bone marrow recovery in treatment of radiation,
 CC or chemotherapeutic induced bone marrow aplasia or myelosuppression. They
 CC are also useful for treating acquired immune deficiency in a human, nerve
 CC damage, neoplasia, infertility, myeloproliferative disorder, intestinal
 CC damage in a mammal. SCF sequences are useful for preparing biologically
 CC active polymer polypeptide adduct, for enhancing transfection of early
 CC haematopoietic progenitor cells with a gene, and transfer of a gene into
 CC a mammal. They are useful for treating myelofibrosis, myelosclerosis,
 CC osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma,
 CC Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease,
 CC Letterer-Siwe disease, refractory erythroblastic anaemia, Di Guglielmo
 CC syndrome, congestive splenomegaly, Kala azar, sarcoidosis, primary
 CC splenic pancytopenia, disseminated fungus disease, malaria, military
 CC tuberculosis, Fulminating septicaemia, pyridoxine deficiency, vitamin B12
 CC and folic acid deficiency, Diamond Blackfan anaemia, hypopigmentation
 CC disorders such as piebaldism, AIDS (acquired immune deficiency syndrome)
 CC and vitiligo. The present sequence is a PCR primer which is used for
 CC amplifying the 5' end of rat SCF cDNA. This sequence is used in the
 CC exemplification of the invention
 XX
 SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAGAAAAA 2726
 DB 20 CCAAGAAAAA 1
 RESULT 936
 ABS73848/c
 ID ABS73848 standard; DNA; 20 BP.
 XX
 AC ABS73848;
 XX
 DT 05-DEC-2002 (first entry)
 XX
 DE SCF universal oligonucleotide 220-3.
 XX
 KW Stem cell factor; SCF; blood-forming system; blood cell disorder;
 KW haematopoietic system; metastatic carcinoma; acute leukaemia;
 KW multiple myeloma; Hodgkin's disease; lymphoma; malaria; vitiligo;
 KW refractory erythroblastic anaemia; miliary tuberculosis; cytostatic;
 KW disseminated fungus disease; haematopoietic; tuberculostatic;
 KW antianaemic; antifungal; antimalarial; dermatological; ss.
 XX
 OS Synthetic.
 XX

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PN EP1241258-A2.
XX
PD
XX
XX 18-SEP-2002.
XX
PF 04-OCT-1990; 2002EP-00008587.
XX
XX 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
XX 28-SEP-1990; 90WO-US005548.
PR 01-OCT-1990; 90US-00589701.
PR 04-OCT-1990; 90EP-00310899.
PR 04-OCT-1990; 95EP-00105391.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zeebo KM, Suggs SV, Bosselman RA, Martin FH;
XX WPI; 2002-684093/74.
XX
XX Production of a human stem cell factor (SCF) polypeptide for treating
PT disorders involving blood cells, such as leukemia, comprises culturing
PT mammalian cells comprising non-human SCF promoter DNA linked to DNA
PT encoding the human SCF.
XX
XX Example 3; Fig 12C; 120pp; English.
XX
XX The present invention relates to novel stem cell factors (SCFs),
CC polynucleotide sequences encoding the SCFs, and methods of producing
CC them. SCFs are involved in the blood-forming (haematopoietic) system in
CC mammals, particularly humans. The method of the invention is useful for
CC the production of human SCF. The stem cell factors are useful to treat
CC disorders involving blood cells e.g. metastatic carcinoma, acute
CC leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, refractory
CC erythroblastic anaemia, military tuberculosis, disseminated fungus
CC disease, malaria, and vitiligo. The present sequence representing a
CC universal oligonucleotide for SCF DNA is used in the examples of the
CC present invention
XX
XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 20 CCAAAAAA 1

RESULT 937
ABS73850/c
ID ABS73850 standard; DNA; 20 BP.
XX
XX ABS73850;
XX
XX 05-DEC-2002 (first entry)
XX
XX SCF universal oligonucleotide 220-11.
XX
XX Stem cell factor; SCF; blood-forming system; blood cell disorder;
KW haematopoietic system; metastatic carcinoma; acute leukaemia;
KW multiple myeloma; Hodgkin's disease; lymphoma; malaria; vitiligo;
KW refractory erythroblastic anaemia; military tuberculosis; cytostatic;
KW disseminated fungus disease; haematopoietic; tuberculous;
KW antianaemic; antifungal; antimalarial; dermatological; ss.
XX
XX Synthetic.
OS
XX EP1241258-A2.
PN
XX
XX 18-SEP-2002.
PD
XX

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PF 04-OCT-1990; 2002EP-00008587.
XX
XX 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 28-SEP-1990; 90WO-US005548.
PR 01-OCT-1990; 90US-00589701.
PR 04-OCT-1990; 90EP-00310899.
PR 04-OCT-1990; 95EP-00105391.
XX
XX (AMGE-) AMGEN INC.
XX
XX Zeebo KM, Suggs SV, Bosselman RA, Martin FH;
XX WPI; 2002-684093/74.
XX
XX Production of a human stem cell factor (SCF) polypeptide for treating
PT disorders involving blood cells, such as leukemia, comprises culturing
PT mammalian cells comprising non-human SCF promoter DNA linked to DNA
PT encoding the human SCF.
XX
XX Example 3; Fig 12C; 120pp; English.
XX
XX The present invention relates to novel stem cell factors (SCFs),
CC polynucleotide sequences encoding the SCFs, and methods of producing
CC them. SCFs are involved in the blood-forming (haematopoietic) system in
CC mammals, particularly humans. The method of the invention is useful for
CC the production of human SCF. The stem cell factors are useful to treat
CC disorders involving blood cells e.g. metastatic carcinoma, acute
CC leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, refractory
CC erythroblastic anaemia, military tuberculosis, disseminated fungus
CC disease, malaria, and vitiligo. The present sequence representing a
CC universal oligonucleotide for SCF DNA is used in the examples of the
CC present invention
XX
XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
Db 20 CGAAAAAA 1

RESULT 938
ADE52460/c
ID ADE52460 standard; DNA; 20 BP.
XX
XX ADE52460;
XX
XX 29-JAN-2004 (first entry)
XX
XX Stem cell factor (SCF) related DNA #31.
XX
XX Stem cell factor; SCF; haematopoietic activity; infertility;
KW intestinal damage; myeloproliferative disorder; leucopenia;
KW thrombocytopenia; anaemia; bone marrow transplant; immune deficiency;
KW neoplasia; nerve damage; osteoporosis; metastatic carcinoma; leukaemia;
KW military tuberculosis; haematopoietic progenitor cell; ss.
XX
XX Synthetic.
OS
XX US2002031491-A1.
PN
XX 14-MAR-2002.
PD
XX
XX 31-DEC-1998; 98US-00224683.
PF
XX
XX 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.

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PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449653.
PR 12-JAN-1998; 98US-00005893.
XX
PA (ZSEB/) ZSEBO K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
PI Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
XX
XX WPI; 2003-851459/79.
XX
XX New non-natural stem cell factor, useful for treating e.g. leucopenia or
XX immune deficiency, also related nucleic acid and antibodies.
XX
XX Disclosure; SEQ ID NO 32; 217pp; English.
XX
XX The invention relates to stem cell factor (SCF) polypeptides with
XX haematopoietic activity and the polynucleotides encoding them. The
XX polypeptides are used for treating infertility, intestinal damage,
XX myeloproliferative disorders, leucopenia, thrombocytopenia or anaemia,
XX marrow recovery after radiotherapy or chemotherapy and in treatment of
XX immune deficiency, neoplasia, nerve damage, osteoporosis, metastatic
XX carcinoma, leukaemia and military tuberculosis. The SCF polypeptides are
XX also used to expand haematopoietic progenitor cells for transplantation
XX and to prepare such cells for transfection with a gene. The SCF
XX polynucleotides can be used for recombinant expression of the
XX polypeptides and also as probes for mapping of the SCF gene, for
XX identifying SCF-related diseases and as a marker for neighbouring genes.
XX Antibodies raised against the polypeptides are useful in diagnosis and to
XX remove SCF from blood. This sequence represents SCF related DNA of the
XX invention.
XX
XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 8.6e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 2707 CTAAGAAAAAAGAAAAA 2726
Db 20 CCAAGAAAAAAGAAAAA 1
XX
RESULT 939
ADE52462/c
XX ADE52462 standard; DNA; 20 BP.
XX
XX ADE52462;
XX
XX 29-JAN-2004 (first entry)
XX
XX Stem cell factor (SCF) related DNA #33.
XX
XX Stem cell factor; SCF; haematopoietic activity; infertility;
XX intestinal damage; myeloproliferative disorder; leucopenia;
XX thrombocytopenia; anaemia; bone marrow transplant; immune deficiency;
XX neoplasia; nerve damage; osteoporosis; metastatic carcinoma; leukaemia;
XX military tuberculosis; haematopoietic progenitor cell; ss.
XX
XX Synthetic.
XX
XX US2002031491-A1.
XX
XX 14-MAR-2002.
XX
XX 31-DEC-1998; 98US-00224683.
XX

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PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449653.
PR 12-JAN-1998; 98US-00005893.
XX
XX (ZSEB/) ZSEBO K M.
XX (BOSS/) BOSSELMAN R A.
XX (SUGG/) SUGGS S V.
XX (MART/) MARTIN F H.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
XX
XX WPI; 2003-851459/79.
XX
XX New non-natural stem cell factor, useful for treating e.g. leucopenia or
XX immune deficiency, also related nucleic acid and antibodies.
XX
XX Disclosure; SEQ ID NO 34; 217pp; English.
XX
XX The invention relates to stem cell factor (SCF) polypeptides with
XX haematopoietic activity and the polynucleotides encoding them. The
XX polypeptides are used for treating infertility, intestinal damage,
XX myeloproliferative disorders, leucopenia, thrombocytopenia or anaemia,
XX marrow recovery after radiotherapy or chemotherapy and in treatment of
XX immune deficiency, neoplasia, nerve damage, osteoporosis, metastatic
XX carcinoma, leukaemia and military tuberculosis. The SCF polypeptides are
XX also used to expand haematopoietic progenitor cells for transplantation
XX and to prepare such cells for transfection with a gene. The SCF
XX polynucleotides can be used for recombinant expression of the
XX polypeptides and also as probes for mapping of the SCF gene, for
XX identifying SCF-related diseases and as a marker for neighbouring genes.
XX Antibodies raised against the polypeptides are useful in diagnosis and to
XX remove SCF from blood. This sequence represents SCF related DNA of the
XX invention.
XX
XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 20;
XX Best Local Similarity 95.0%; Pred. No. 8.6e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Qy 2707 CTAAGAAAAAAGAAAAA 2726
Db 20 CGAAGAAAAAAGAAAAA 1
XX
RESULT 940
ABZ85312/c
XX ABZ85312 standard; DNA; 20 BP.
XX
XX ABZ85312;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX

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PD 31-OCT-2002.
XX
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
PI
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Claim 15; SEQ ID NO 554; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of adenosine or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2708 TAAAAAATAAAAAATAAAAA 2727
Db 20 TGAATAAAAAATAAAAAATAAAAA 1
RESULT 941
ABZ89301
ID ABZ89301 standard; DNA; 20 BP.
XX
XX ABZ89301;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
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PD 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
PI
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 4543; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 17 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAAAAAATAAAAAATAAAAA 2726
Db 1 CTCAAAAAATAAAAAATAAAAA 20
RESULT 942
ABZ89085
ID ABZ89085 standard; DNA; 20 BP.
XX
XX ABZ89085;
XX
XX 17-OCT-2003 (first entry)
XX
XX Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
XX
XX WO200285308-A2.
XX
```

PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Disclosure; SEQ ID NO 4327; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 19 A; 0 C; 1 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AGAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 943
 ABD25315
 ID ABD25315 standard; DNA; 20 BP.
 XX
 AC ABD25315;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE A1092429-derived oligonucleotide SEQ ID 4327.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 OS Homo sapiens.
 XX

PN WO200285309-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013143.
 XX
 PR 24-APR-2001; 2001US-0286036P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-093058/08.
 XX
 PT Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 PS Claim 15; SEQ ID NO 4327; 763pp; English.
 XX
 CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 19 A; 0 C; 1 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 Db 1 AGAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 944
 ABD21542/c
 ID ABD21542 standard; DNA; 20 BP.
 XX
 AC ABD21542;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 DE S100 calcium binding protein A2-derived oligo SEQ ID 554.

XX Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytosolic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 XX Homo sapiens.
 XX
 XX WO200285309-A2.
 XX
 XX 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 554; 763pp; English.
 XX
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytosolic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 XX Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
 XX

Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2727

|||||

Db 20 TGAATAAAAAAAAAAAAAA 1
 RESULT 945
 ABD25531
 ID ABD25531 standard; DNA; 20 BP.
 XX
 AC ABD25531;
 XX
 DT 29-JUL-2004 (first entry)
 XX
 XX A1125651-derived oligonucleotide SEQ ID 4543.
 XX
 KW Human; antisense; bronchoconstriction; allergy; hyposcretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytosolic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX
 XX Homo sapiens.
 XX
 XX WO200285309-A2.
 XX
 XX 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 4543; 763pp; English.
 XX
 XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposcretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytosolic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 XX Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
 XX

CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 17 A; 2 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2726
 |||||
 Db 1 CTCAGAAAAA 20

RESULT 946
 ADH67400/C
 ID ADH67400 standard; DNA; 20 BP.
 XX
 AC ADH67400;
 XX
 DT 25-MAR-2004 (first entry)
 XX
 DE Human glucocorticoid receptor-specific antisense oligonucleotide #4234.
 XX
 KW antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
 XX
 OS Homo sapiens.

XX WO2003099215-A2.
 XX
 PD 04-DEC-2003.
 XX

PF 20-MAY-2003; 2003WO-US016084.

PR 20-MAY-2002; 2002US-0381857P.

XX (PHAA) PHARMACIA CORP.

XX Crosby SD, Naleeth AE;

PI WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.

XX Claim 4; SEQ ID NO 4234; 985pp; English.

XX The invention comprises an antisense oligonucleotides that are targeted
 CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
 CC antisense oligonucleotides of the invention are useful for preventing or
 CC delaying infection, inflammation or tumour formation. The antisense
 CC oligonucleotides are also useful for treating diabetes, obesity,
 CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
 CC present DNA sequence represents an antisense oligonucleotide that targets
 CC the human glucocorticoid receptor gene. NOTE: The present sequence
 CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAGAAAAA 2727
 |||||
 Db 20 TCAGAAAAA 1

RESULT 947
 ADK67452
 ID ADK67452 standard; DNA; 20 BP.
 XX
 AC ADK67452;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Electrochemical detection intercalator-related DNA 2.
 XX
 KW intercalator; electrochemical detection; mismatch; ss.
 XX
 OS Synthetic.

XX JP2004024114-A.

XX 29-JAN-2004.

XX 26-JUN-2002; 2002JP-00185555.

XX 26-JUN-2002; 2002JP-00185555.

XX (TAKE/) TAKENAKA S.
 XX (TUMK-) TUM KENKYUSHO KK.

XX WPI; 2004-207136/20.

XX Novel intercalator, useful as electrochemical double stranded DNA
 PT detection reagent.
 XX

PS Example 1; Page 23; 24pp; Japanese.

XX The invention relates to a novel intercalator having a specific formula.
 CC The intercalator of the invention may be useful for the electrochemical
 CC detection of a gene, as an electrochemical double stranded DNA detection
 CC reagent and as an intercalator for inhibiting the influence of mismatch of
 CC DNA and single stranded DNA. The intercalator enables the transmission of
 CC electronic transition between two base pairs to occur efficiently. The
 CC current sequence is that of the electrochemical detection intercalator-
 CC related DNA 2 of the invention.

XX SQ Sequence 20 BP; 19 A; 0 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAA 2728
 |||||
 Db 1 AAAAAAAGAAAAA 20

RESULT 948
 ADK74442/c

ID ADK74442 standard; DNA; 20 BP.

XX ADK74442;

XX 20-MAY-2004 (first entry)

XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1776.

XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
 KW diabetic neuropathy; arthritic pain; migraine headache;
 KW infantile epilepsy; ataxia; ss.

XX Synthetic.

XX WO2004016754-A2.

XX 26-FEB-2004.

XX 14-AUG-2003; 2003WO-US025465.

```

XX 14-AUG-2002; 2002US-0403416P.
XX (PHAA ) PHARMACIA CORP.
XX Roberds SL;
XX WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Navi1.3, useful for treating a disease or condition associated
PT with Navi1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 1776; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Navi1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Navi1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Navi1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'-MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Navi1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Navi1.3 RNA.
XX
XX Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2727
Db 20 TCAAAAAAAAAAAAAAAAAA 1

RESULT 949
ADM14467/c
XX ADM14467 standard; DNA; 20 BP.
XX
XX ADM14467;
XX
XX 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:654.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20 /*tag= b
FT /*mod_base= OTHER
FT /*note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a

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FT /*mod_base= OTHER
FT /*note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /*mod_base= OTHER
FT /*note= "2'-O-methoxyethyls"
XX
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
PT encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT ischemia.
XX
XX Claim 4; SEQ ID NO 654; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
CC targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC human mPGES-1 gene is located on chromosome 9, more specifically to
CC 9q34.3. The present invention also describes: (1) antisense compounds,
CC having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC mPGES-1, which specifically hybridize with the nucleic acid mPGES-1 and
CC inhibits its expression; (2) a method of inhibiting the expression of
CC mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC having a disease or condition associated with mPGES-1. mPGES-1 chimeric
CC antisense oligonucleotides and antisense compounds have cytostatic,
CC antidiabetic, immunomodulator, cardiant, neuroprotective,
CC antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2726
Db 20 CCAAAAAAAAAAAAAAAAAA 1

RESULT 950
ADP69247/c
XX ADP69247 standard; DNA; 20 BP.
XX
XX ADP69247;
XX
XX 09-SEP-2004 (first entry)
XX
XX Human mitoNEET-specific antisense oligonucleotide #141.
XX
XX human; antisense oligonucleotide; mitochondrial membrane;
KW insulin sensitising antidiabetic thiazolidinediones; mitoNEET; diabetes;
KW immunological disorder; cardiovascular disorder; including hypertension;
KW neurological disorders; ischaemia; reperfusion; ss;
KW 2'-methoxyethyl gapmer; 2'-MOE gapmer; phosphorothioate backbone.

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XX OS Homo sapiens.
XX PN WO2004053060-A2.
XX PD 24-JUN-2004.
XX PF 25-NOV-2003; 2003WO-US037621.
XX PR 06-DEC-2002; 2002US-0431529P.
XX PA (PHAA ) PHARMACIA CORP.
XX PI Colca JR;
XX DR WPI; 2004-468836/44.
XX PT New antisense oligonucleotides encoding mitoNEET, useful for modulating
XX FT mitoNEET expression or for treating diseases associated with mitoNEET,
XX PR e.g. diabetes, immunological disorders or cardiovascular disorders.
XX PS Claim 4; SEQ ID NO 141; 226pp; English.
XX CC The invention comprises antisense oligonucleotides that are targeted to
XX CC the nucleic acids encoding a family of human proteins from mitochondrial
XX CC membranes, which bind insulin sensitising, antidiabetic
XX CC thiazolidinediones (referred to as: mitoNEET). The antisense
XX CC oligonucleotides of the invention are useful for modulating mitoNEET
XX CC expression and for treating diseases or conditions associated with
XX CC mitoNEET, such as: diabetes, immunological disorders, cardiovascular
XX CC disorders including hypertension, neurological disorders, and
XX CC ischaemia/reperfusion injuries. The present DNA sequence represents a
XX CC mitoNEET-specific antisense oligonucleotide of the invention. NOTE: The
XX CC present sequence is a 2'-methoxyethyl (2'-MOE) gapmer with a
XX CC phosphorothioate backbone.
XX SQ Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
    Query Match 0.7%; Score 18.4; DB 1; Length 20;
    Best Local Similarity 95.0%; Pred. No. 8.6e+02;
    Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2708 TAAAAA..... 2727
Db 20 TAAACAAAAA..... 1

RESULT 951
ADP69193/c
ID ADP69193 standard; DNA; 20 BP.
XX ADP69193;
XX AC ADP69193;
XX DT 09-SEP-2004 (first entry)
XX DE Human mitoNEET-specific antisense oligonucleotide #87.
XX KW human; antisense oligonucleotide; mitochondrial membrane;
XX KW insulin sensitising antidiabetic thiazolidinediones; mitoNEET; diabetes;
XX KW immunological disorder; cardiovascular disorder; including hypertension;
XX KW neurological disorders; ischaemia; reperfusion; ss;
XX KW 2'-methoxyethyl gapmer; 2'-MOE gapmer; phosphorothioate backbone.
XX OS Homo sapiens.
XX PN WO2004053060-A2.
XX PD 24-JUN-2004.
XX PF 25-NOV-2003; 2003WO-US037621.
XX PR 06-DEC-2002; 2002US-0431529P.
XX
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PA (PHAA ) PHARMACIA CORP.
XX Colca JR;
XX DR WPI; 2004-468836/44.
XX PT New antisense oligonucleotides encoding mitoNEET, useful for modulating
XX FT mitoNEET expression or for treating diseases associated with mitoNEET,
XX PR e.g. diabetes, immunological disorders or cardiovascular disorders.
XX PS Claim 4; SEQ ID NO 87; 226pp; English.
XX CC The invention comprises antisense oligonucleotides that are targeted to
XX CC the nucleic acids encoding a family of human proteins from mitochondrial
XX CC membranes, which bind insulin sensitising, antidiabetic
XX CC thiazolidinediones (referred to as: mitoNEET). The antisense
XX CC oligonucleotides of the invention are useful for modulating mitoNEET
XX CC expression and for treating diseases or conditions associated with
XX CC mitoNEET, such as: diabetes, immunological disorders, cardiovascular
XX CC disorders including hypertension, neurological disorders, and
XX CC ischaemia/reperfusion injuries. The present DNA sequence represents a
XX CC mitoNEET-specific antisense oligonucleotide of the invention. NOTE: The
XX CC present sequence is a 2'-methoxyethyl (2'-MOE) gapmer with a
XX CC phosphorothioate backbone.
XX SQ Sequence 20 BP; 0 A; 0 C; 1 G; 19 T; 0 U; 0 Other;
    Query Match 0.7%; Score 18.4; DB 1; Length 20;
    Best Local Similarity 95.0%; Pred. No. 8.6e+02;
    Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAA..... 2728
Db 20 AAACAAAAA..... 1

RESULT 952
ADP99304/c
ID ADP99304 standard; DNA; 20 BP.
XX ADP99304;
XX AC ADP99304;
XX DT 23-SEP-2004 (first entry)
XX DE Stem cell factor, SCF, universal PCR primer #4.
XX KW SCF; stem cell factor; gene therapy; haematopoietic progenitor cell;
XX KW aplastic anaemia; paroxysmal nocturnal haemoglobinuria; myelofibrosis;
XX KW myelocytosis; osteopetrosis; metastatic carcinoma; acute leukaemia;
XX KW multiple myeloma; Hodgkin's disease; lymphoma; Gaucher's disease;
XX KW Niemann-Pick disease; Letterer-Siwe disease;
XX KW refractory erythroblastic anaemia; Di Guglielmo syndrome;
XX KW congestive splenomegaly; Kala awar; sarcoidosis;
XX KW primary splenic pancytopenia; milary tuberculosis;
XX KW disseminated fungus disease; Fulminating septicemia; malaria;
XX KW vitamin B12 deficiency; folic acid deficiency; pyridoxine deficiency;
XX KW Diamond Blackfan anaemia; hypopigmentation disorder; piebaldism;
XX KW vitiligo; neurological damage; infertility; intestinal damage;
XX KW irradiation; chemotherapy; AIDS; haematopoietic recovery;
XX KW acute blood loss; neoplasia; cancer; ss; PCR; primer.
XX OS Mammalia.
XX PN US6759215-B1.
XX PD 06-JUL-2004.
XX PF 07-AUG-2000; 2000US-00635251.
XX PR 16-OCT-1989; 89US-00422383.
XX PR 11-JUN-1990; 90US-00537198.
XX PR 24-AUG-1990; 90US-00573616.
XX PR 01-OCT-1990; 90US-00589701.
XX
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PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449182.
PA (AMGE-) AMGEN INC.
PA Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI WPI; 2004-497128/47.
DR
XX
XX Preparing a human stem cell factor (SCF) polypeptide, useful for treating
PT hematopoietic disorders, e.g., aplastic anemia, comprises growing host
PT cells transformed or transfected with DNA encoding a human SCF.
XX
PS Example 3; SEQ ID NO 34; 210pp; English.
XX
XX The invention relates to preparing a (vertebrate) human stem cell factor
CC (SCF) polypeptide comprising growing host cells transformed or
CC transfected with DNA encoding a human SCF that stimulates growth of
CC hematopoietic progenitor cells under nutrient conditions, the DNA being
CC operatively linked to an expression control sequence, and isolating the
CC polypeptide produced. Also included is a recombinant host cell
CC transformed or transfected with an expression construct comprising a
CC vertebrate SCF polypeptide-encoding DNA operatively linked to a
CC heterologous expression regulatory sequence, permitting the expression of
CC the vertebrate SCF polypeptide in the host cell. Disclosed as new are rat
CC and human nucleic acids encoding SCF, SCF proteins from a number of other
CC mammals and recombinantly expressed SCF protein fragments. The DNA
CC sequences are useful for effecting the large scale synthesis of SCF by a
CC variety of recombinant techniques or for generating new and useful viral
CC and circular plasmid DNA vectors, new and useful transformed and
CC transfected prokaryotic and eukaryotic host cells, and new and useful
CC methods for cultured growth of such host cells capable of expression of
CC SCF and its related products. The DNA sequences are also useful as
CC labelled probes in isolating human genomic DNA encoding SCF, in methods
CC of protein synthesis, in genetic therapy in humans and other mammals, and
CC in developing transgenic mammalian species which may serve as eukaryotic
CC hosts for production of SCF and SCF products in quantity. The SCF is
CC useful for treating hematopoietic disorders, e.g., aplastic anaemia,
CC osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma,
CC Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease,
CC Letterer-Siwe disease, refractory erythroblastic anaemia, Di Guglielmo
CC syndrome, congestive splenomegaly, Kala awar, sarcoidosis, primary
CC splenic pancytopenia, myeloid leukemia, disseminated fungus disease,
CC pyridoxine deficiency, Diamond Blackfan anaemia, and hypopigmentation
CC disorders such as piebaldism and vitiligo. The SCF are also useful for
CC treating neurological damage, infertility states, intestinal damage
CC resulting from irradiation or chemotherapy, and AIDS. SCF is also useful
CC for enhancing hematopoietic recovery after acute blood loss and as a
CC boost to the immune system for fighting neoplasia (cancer). The present
CC sequence is a universal SCF PCR primer used in the isolation of SCF DNA.
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2707 CTAAGAAAAAAGAAAAA 2726
Db 20 CGAAAAAAGAAAAAAGAAAAA 1
RESULT 953
ADP99302/c
ID ADP99302 standard; DNA; 20 BP.
XX
AC ADP99302;
XX
DT 23-SEP-2004 (first entry)

XX Stem cell factor, SCF, universal PCR primer #2.
DE
XX
KW SCF; stem cell factor; gene therapy; hematopoietic progenitor cell;
KW aplastic anaemia; paroxysmal nocturnal haemoglobinuria; myelofibrosis;
KW myelosclerosis; osteopetrosis; metastatic carcinoma; acute leukaemia;
KW multiple myeloma; Hodgkin's disease; lymphoma; Gaucher's disease;
KW Niemann-Pick disease; Letterer-Siwe disease;
KW refractory erythroblastic anaemia; Di Guglielmo syndrome;
KW congestive splenomegaly; Kala awar; sarcoidosis;
KW primary splenic pancytopenia; myeloid leukemia; malaria;
KW disseminated fungus disease; fulminating septicaemia; vitamin B12
KW vitamin B12 deficiency; folic acid deficiency; pyridoxine deficiency;
KW Diamond Blackfan anaemia; hypopigmentation disorder; piebaldism;
KW vitiligo; neurological damage; infertility; intestinal damage;
KW irradiation; chemotherapy; AIDS; hematopoietic recovery;
KW acute blood loss; neoplasm; cancer; ss; PCR; primer.
XX
XX Mammalia.
OS
XX US6759215-B1.
PN
XX
XX 06-JUL-2004.
PD
XX
XX 07-AUG-2000; 2000US-00635251.
PF
XX
XX 16-OCT-1989; 89US-00422383.
PR
XX 11-JUN-1990; 90US-00537199.
PR
XX 24-OCT-1990; 90US-00573616.
PR
XX 01-OCT-1990; 90US-00589701.
PR
XX 10-APR-1991; 91US-00694535.
PR
XX 25-NOV-1992; 92US-00982255.
PR
XX 21-DEC-1993; 93US-00172329.
PR
XX 24-MAY-1995; 95US-00449182.
PA (AMGE-) AMGEN INC.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI WPI; 2004-497128/47.
XX
XX Preparing a human stem cell factor (SCF) polypeptide, useful for treating
PT hematopoietic disorders, e.g., aplastic anemia, comprises growing host
PT cells transformed or transfected with DNA encoding a human SCF.
XX
XX Example 3; SEQ ID NO 32; 210pp; English.
XX
XX The invention relates to preparing a (vertebrate) human stem cell factor
CC (SCF) polypeptide comprising growing host cells transformed or
CC transfected with DNA encoding a human SCF that stimulates growth of
CC hematopoietic progenitor cells under nutrient conditions, the DNA being
CC operatively linked to an expression control sequence, and isolating the
CC polypeptide produced. Also included is a recombinant host cell
CC transformed or transfected with an expression construct comprising a
CC vertebrate SCF polypeptide-encoding DNA operatively linked to a
CC heterologous expression regulatory sequence, permitting the expression of
CC the vertebrate SCF polypeptide in the host cell. Disclosed as new are rat
CC and human nucleic acids encoding SCF, SCF proteins from a number of other
CC mammals and recombinantly expressed SCF protein fragments. The DNA
CC sequences are useful for effecting the large scale synthesis of SCF by a
CC variety of recombinant techniques or for generating new and useful viral
CC and circular plasmid DNA vectors, new and useful transformed and
CC transfected prokaryotic and eukaryotic host cells, and new and useful
CC methods for cultured growth of such host cells capable of expression of
CC SCF and its related products. The DNA sequences are also useful as
CC labelled probes in isolating human genomic DNA encoding SCF, in methods
CC of protein synthesis, in genetic therapy in humans and other mammals, and
CC in developing transgenic mammalian species which may serve as eukaryotic
CC hosts for production of SCF and SCF products in quantity. The SCF is
CC useful for treating hematopoietic disorders, e.g., aplastic anaemia,
CC osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma,
CC Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease,
CC Letterer-Siwe disease, refractory erythroblastic anaemia, Di Guglielmo
CC syndrome, congestive splenomegaly, Kala awar, sarcoidosis, primary
CC splenic pancytopenia, myeloid leukemia, disseminated fungus disease,
CC pyridoxine deficiency, Diamond Blackfan anaemia, and hypopigmentation
CC disorders such as piebaldism and vitiligo. The SCF are also useful for
CC treating neurological damage, infertility states, intestinal damage
CC resulting from irradiation or chemotherapy, and AIDS. SCF is also useful
CC for enhancing hematopoietic recovery after acute blood loss and as a
CC boost to the immune system for fighting neoplasia (cancer). The present
CC sequence is a universal SCF PCR primer used in the isolation of SCF DNA.
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 2707 CTAAGAAAAAAGAAAAA 2726
Db 20 CGAAAAAAGAAAAAAGAAAAA 1
RESULT 953
ADP99302/c
ID ADP99302 standard; DNA; 20 BP.
XX
AC ADP99302;
XX
DT 23-SEP-2004 (first entry)

CC Letterer-Siwe disease, refractory erythroblastic anaemia, Di Guglielmo
 CC syndrome, congestive splenomegaly, Kala awar, sarcoidosis, primary
 CC splenic pancytopenia, milary tuberculosis, disseminated fungus disease,
 CC Fulminating septicemia, malaria, vitamin B 12 and folic acid deficiency,
 CC pyridoxine deficiency, Diamond Blackfan anaemia, and hypopigmentation
 CC disorders such as piebaldism and vitiligo. The SCF are also useful for
 CC treating neurological damage, infertility states, intestinal damage
 CC resulting from irradiation or chemotherapy, and AIDS. SCF is also useful
 CC for enhancing haematopoietic recovery after acute blood loss and as a
 CC boost to the immune system for fighting neoplasia (cancer). The present
 CC sequence is a universal SCF PCR primer used in the isolation of SCF DNA.
 XX
 SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. NO. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2726
 Db 20 CCAAAAAAATAAAAAAAAAA 1

RESULT 954
 ADU50634/C
 ID ADU50634 standard; DNA; 20 BP.
 XX
 AC ADU50634;
 XX
 DT 13-JAN-2005 (first entry)
 XX
 DE Human/rat stem cell factor, SCF, primer 220-11.
 KW Stem cell factor; SCF; haematopoietic; HT1080 fibrosarcoma cell line;
 KW 5637 bladder carcinoma cell line; leukopaemia; thrombocytopaenia;
 KW anaemia; bone marrow during transplant; bone marrow aplasia;
 KW myelosuppression; immune deficiency; neoplasm; nerve damage; infertility;
 KW intestinal damage; myeloproliferative disorder;
 KW early haematopoietic progenitor cell; haematopoietic disorders;
 KW aplastic anaemia; myelofibrosis; myelosclerosis; osteopetrosis;
 KW metastatic carcinoma; multiple myeloma; Hodgkin's disease; lymphoma;
 KW Gaucher's disease; Niemann-Pick disease; Diamond-Blackfan anaemia; DBA;
 KW Fanconi's anaemia; gene therapy; acute blood loss; ss; PCR; primer;
 KW probe.
 XX
 OS Homo sapiens.
 OS Rattus norvegicus.
 XX
 XX US2004181044-A1.
 XX
 PD 16-SEP-2004.
 XX
 XX 19-JUN-2002; 2002US-00175608.
 PF
 XX 16-OCT-1989; 89US-00422383.
 PR 11-JUN-1990; 90US-00537198.
 PR 24-AUG-1990; 90US-00573616.
 PR 01-OCT-1990; 90US-00589701.
 PR 10-APR-1991; 91US-00684535.
 PR 25-NOV-1992; 92US-00982255.
 PR 21-DEC-1993; 93US-00172329.
 PR 07-JUN-1995; 95US-00486546.
 PR 07-AUG-2000; 2000US-00635249.
 XX
 XX (ZSEB/) ZSEBO K M.
 PA (BOSS/) BOSSELMAN R A.
 PA (SUGG/) SUGGS S V.
 PA (MART/) MARTIN F H.
 XX
 XX Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
 PI
 XX WPI; 2004-707481/69.
 DR
 XX

PT Novel stem cell factor (SCF) such as non-naturally-occurring SCF or
 PT naturally occurring SCF, useful for treating leukopenia.
 PT thrombocytopaenia, anemia, and enhancing engraftment of bone marrow during
 PT transplantation.
 XX

PS Example 3; SEQ ID NO 34; 216pp; English.

XX The invention relates to a stem cell factor (SCF) such as non-naturally-
 CC occurring SCF having an amino acid sequence sufficiently duplicative of
 CC that of naturally occurring SCF to allow possession of a haematopoietic
 CC biological activity of naturally occurring stem cell factor, or naturally
 CC occurring SCF. Also included are an isolated DNA sequence for use in
 CC securing expression in a prokaryotic or eukaryotic host cell of non-
 CC naturally occurring SCF, a prokaryotic or eukaryotic host cell
 CC transformed or transfected with the DNA, a polypeptide product of the
 CC expression of the DNA in a prokaryotic or eukaryotic host cell, an
 CC isolated DNA sequence coding for prokaryotic or eukaryotic host
 CC expression of non-naturally occurring SCF, a DNA sequence coding for a
 CC polypeptide fragment or polypeptide analogue of naturally-occurring stem
 CC cell factor, a biologically functional plasmid or viral DNA vector
 CC including the DNA sequence above, a prokaryotic or eukaryotic host cell
 CC stably transformed or transfected with the DNA, a polypeptide having part
 CC or all of amino acid sequence encoded by composite nucleic acid sequence
 CC of human SCF cDNA, human SCF cDNA sequence obtained from HT1080
 CC fibrosarcoma cell line, or human SCF cDNA obtained from 5637 bladder
 CC carcinoma cell line (and having one or more of in vitro biological
 CC activity of naturally-occurring stem cell factor, and an antibody (Ab)
 CC specifically binding SCF. SCF is useful for treating leukopaemia,
 CC thrombocytopaenia, anaemia, and enhancing engraftment of bone marrow
 CC during transplantation in a mammal. SCF is useful enhancing bone marrow
 CC recovery in treatment of radiation, chemical, or chemotherapeutic induced
 CC bone marrow aplasia or myelosuppression which involves treating patients
 CC with therapeutically effective doses of SCF. SCF is useful for treating
 CC acquired immune deficiency, neoplasia, nerve damage, infertility,
 CC intestinal damage, and a myeloproliferative disorder. SCF is useful for
 CC transfecting early haematopoietic progenitor cells with a gene which
 CC involves culturing early haematopoietic progenitor cells with SCF, and
 CC transfecting the cultured cells with a gene. SCF is useful for
 CC transfecting a gene to a mammal which involves culturing early
 CC haematopoietic progenitor cells with SCF, transfecting the cultured cells
 CC with a gene, and administering the cultured cell to the mammal. SCF is
 CC useful for treating various haematopoietic disorders, aplastic anaemia,
 CC myelofibrosis, myelosclerosis, osteopetrosis, metastatic carcinoma, acute
 CC leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, Gaucher's
 CC disease, Niemann-Pick disease, Diamond-Blackfan anaemia (DBA), Fanconi's
 CC anaemia. SCF is useful for enhancing the efficiency of gene therapy, for
 CC enhancing haematopoietic recovery after acute blood loss. The present
 CC sequence is a primer and/or probe used in the isolation of SCF nucleic
 CC acids.

XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;

Best Local Similarity 95.0%; Pred. NO. 8.6e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2726

Db 20 CCAAAAAAATAAAAAAAAAA 1

RESULT 955

ADU50632/C

ID ADU50632 standard; DNA; 20 BP.

XX

AC ADU50632;

XX

DT 13-JAN-2005 (first entry)

XX

DE Human/rat stem cell factor, SCF, primer 220-3.

XX

KW Stem cell factor; SCF; haematopoietic; HT1080 fibrosarcoma cell line;

KW 5637 bladder carcinoma cell line; leukopaemia; thrombocytopaenia;

anaemia; bone marrow during transplant; bone marrow aplasia; myelosuppression; immune deficiency; neoplasm; nerve damage; infertility; intestinal damage; myeloproliferative disorder;
 early haematopoietic progenitor cell; haematopoietic disorders; aplastic anaemia; myelofibrosis; myeloclerosis; osteopetrosis; metastatic carcinoma; multiple myeloma; Hodgkin's disease; lymphoma; Gaucher's disease; Niemann-Pick disease; Diamond-Blackfan anaemia; DBA; Fanconi's anaemia; gene therapy; acute blood loss; ss; PCR; primer; probe.
 Homo sapiens.
 Rattus norvegicus.
 US2004181044-A1.
 16-SRP-2004.
 19-JUN-2002; 2002US-00175608.
 16-OCT-1989; 89US-00422383.
 11-JUN-1990; 90US-00537198.
 24-AUG-1990; 90US-00573616.
 01-OCT-1990; 90US-00589701.
 10-APR-1991; 91US-00684535.
 25-NOV-1992; 92US-00982255.
 21-DEC-1993; 93US-00172329.
 07-JUN-1995; 95US-00486546.
 07-AUG-2000; 2000US-00635249.
 (ZSEB/) ZSEBO K M.
 (BOSS/) BOSSelman R A.
 (SUGG/) SUGGS S V.
 (MART/) MARTIN F H.
 Zeebo KM, Bosselman RA, Suggs SV, Martin FH; WPI; 2004-707481/69.
 Novel stem cell factor (SCF) such as non-naturally-occurring SCF or naturally occurring SCF, useful for treating leukopenia, thrombocytopenia, anemia, and enhancing engraftment of bone marrow during transplantation.
 Example 3; SEQ ID NO 32; 216pp; English.
 The invention relates to a stem cell factor (SCF) such as non-naturally-occurring SCF having an amino acid sequence sufficiently duplicative of that of naturally occurring SCF to allow possession of a haematopoietic biological activity of naturally occurring stem cell factor, or naturally occurring SCF. Also included are an isolated DNA sequence for use in securing expression in a prokaryotic or eukaryotic host cell of non-naturally occurring SCF, a prokaryotic or eukaryotic host cell transformed or transfected with the DNA, a polypeptide product of the expression of the DNA in a prokaryotic or eukaryotic host cell, an isolated DNA sequence coding for prokaryotic or eukaryotic host expression of non-naturally occurring SCF, a DNA sequence coding for a polypeptide fragment or polypeptide analogue of naturally-occurring stem cell factor, a biologically functional plasmid or viral DNA vector including the DNA sequence above, a prokaryotic or eukaryotic host cell stably transformed or transfected with the DNA, a polypeptide having part or all of amino acid sequence encoded by composite nucleic acid sequence of human SCF cDNA, human SCF cDNA sequence obtained from Hri080 fibrosarcoma cell line, or human SCF cDNA obtained from 5637 bladder carcinoma cell line (and having one or more of in vitro biological activity of naturally-occurring stem cell factor, and an antibody (Ab) specifically binding SCF. SCF is useful for treating leukopenia, thrombocytopenia, anemia, and enhancing engraftment of bone marrow during transplantation in a mammal. SCF is useful enhancing bone marrow recovery in treatment of radiation, chemical, or chemotherapeutic induced bone marrow aplasia or myelosuppression which involves treating patients with therapeutically effective doses of SCF. SCF is useful for treating acquired immune deficiency, neoplasia, nerve damage, infertility, intestinal damage, and a myeloproliferative disorder. SCF is useful for

transfecting early haematopoietic progenitor cells with a gene which involves culturing early haematopoietic progenitor cells with SCF, and transfecting the cultured cells with a gene. SCF is useful for transfecting a gene to a mammal which involves culturing early haematopoietic progenitor cells with SCF, transfecting the cultured cells with a gene, and administering the cultured cell to the mammal. SCF is useful for treating various haematopoietic disorders, aplastic anaemia, myelofibrosis, myeloclerosis, osteopetrosis, metastatic carcinoma, acute leukaemia, multiple myeloma, Hodgkin's disease, lymphoma, Gaucher's disease, Niemann-Pick disease, Diamond-Blackfan anaemia (DBA), Fanconi's anaemia. SCF is useful for enhancing the efficiency of gene therapy, for enhancing haematopoietic recovery after acute blood loss. The present sequence is a primer and/or probe used in the isolation of SCF nucleic acids.
 Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18.4; DB 1; Length 20;
 Best Local Similarity 95.0%; Pred. No. 8.6e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAAAAATAAAAAAAAAA 2726
 Db 20 CCAAAAAAAAAAAAAAAAAA 1
 RESULT 956
 ADW93077/c
 ID ADW93077 standard; DNA; 20 BP.
 XX
 AC ADW93077;
 XX
 DT 21-APR-2005 (first entry)
 XX
 DE Universal Stem Cell Factor PCR primer 220-3, SEQ ID 32.
 XX
 KW Antianemic; Antiemetic; Cytostatic; Anti-HIV; Cardiovascular-Gen.; CNS-Gen.; Antiparasitic; Antibacterial; Immunosuppressive; Antinflammatory; Fungicide; Antifertility; AIDS; aplastic anemia; paroxysmal nocturnal hemoglobinuria; osteopetrosis; acute leukemia; multiple myeloma; hodgkins disease; lymphoma; gauchers disease; niemann pick disease; sarcoidosis; plasmodium infection; vitamin deficiency; hypopigmentation; vitiligo; infertility; chronic myelocytic leukemia; cell proliferation; Stem Cell Factor; PCR; primer; ss.
 XX
 OS Synthetic.
 XX
 PN US6852313-B1.
 XX
 PD 08-FEB-2005.
 XX
 PF 26-JUN-2000; 2000US-00604325.
 XX
 PR 16-OCT-1989; 89US-00422383.
 PR 11-JUN-1990; 90US-00537198.
 PR 24-AUG-1990; 90US-00573616.
 PR 01-OCT-1990; 90US-00589701.
 PR 10-APR-1991; 91US-00684535.
 PR 25-NOV-1992; 92US-00982255.
 PR 21-DEC-1993; 93US-00172329.
 PR 24-MAY-1995; 95US-00449649.
 XX
 XX (AMGE-) AMGEN INC.
 PA
 PI Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
 XX
 XX WPI; 2005-160562/17.
 DR
 XX Stimulating proliferation of melanocyte cells in human, involves administering stem cell factor polypeptide or its biologically active fragments stimulating growth of melanocyte cells, and optionally carrier, to human.
 PT

```

XX Example 3; SEQ ID NO 32; 212pp; English.
XX
CC The present invention relates to a method (M1) for stimulating
CC proliferation of melanocyte cells in a human. (M1) involves administering
CC a Stem Cell Factor (SCF) protein, or its biologically active fragments
CC that stimulates growth of melanocyte cells, and optionally a carrier, to
CC the human. The SCF is covalently conjugated to a water soluble polymer
CC e.g. polyethylene glycol. Also, the SCF is co-administered with one or
CC more other cytokines. SCF is also able to stimulate the growth of
CC primitive progenitors such as early hematopoietic progenitor cells that
CC are capable of maturing to erythroid, megakaryocyte, granulocyte, and
CC lymphocyte and macrophage cells, and non-hematopoietic stem cells such as
CC neural stem cells and primordial germ stem cells. (M1) is useful in
CC accelerating bone marrow regeneration, and in augmenting T cell
CC production. (M1) is useful for treating stem cells disorders that are
CC characterized by a reduction in functional marrow mass due to toxic,
CC radiat or immunological injury. (M1) is useful in treating AIDS,
CC aplastic anemia, paroxysmal nocturnal hemoglobinuria, myelofibrosis,
CC myelosclerosis, osteopetrosis, metastatic carcinoma, acute leukemia,
CC multiple myeloma, congestive splenomegaly, Kalaazar, sarcoidosis, primary
CC splenic pancytopenia, disseminated fungus disease, fulminating
CC pyridoxine deficiency disease, and hypopigmentation disorders such as
CC piebaldism and vitiligo. (M1) is useful in treating infertility states,
CC intestinal damage resulting from irradiation or chemotherapy, and stem
CC cell myeloproliferative disorders such as chronic myelogenous leukemia,
CC primary thrombocythemia and acute leukemia. (M1) is useful in expanding
CC early hematopoietic progenitors in syngeneic, allogeneic or autologous
CC bone marrow transplantation, and in enhancing the efficacy of gene
CC therapy. The present sequence is a PCR primer used in an example from the
CC invention for cloning SCF.
XX
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAAGAAAAA 2726
DB 20 CCAAAAAA 1
RESULT 957
ADW93079/C
ID ADW93079 standard; DNA; 20 BP.
XX
AC ADW93079;
XX
DT 21-APR-2005 (first entry)
XX
DE Universal Stem Cell Factor PCR primer 220-11, SEQ ID 34.
XX
KW Antianemic; Antileptic; Cytostatic; Anti-HIV; Cardiovascular-Gen.;
KW CNS-Gen.; Antiparasitic; Antibacterial; Immunosuppressive;
KW Antiinflammatory; Fungicide; Antifertility; AIDS; aplastic anemia;
KW paroxysmal nocturnal hemoglobinuria; osteopetrosis; acute leukemia;
KW multiple myeloma; hodgkins disease; lymphoma; gauchers disease;
KW niemann pick disease; sarcoidosis; plasmodium infection;
KW vitamin deficiency; hypopigmentation; vitiligo; infertility;
KW chronic myelocytic leukemia; cell proliferation; Stem Cell Factor; PCR;
KW primer; ss.
XX
OS Synthetic.
XX
PN US6852313-B1.
XX
PD 08-FEB-2005.
XX
PF 26-JUN-2000; 2000US-00604325.
XX

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PR 16-OCT-1989; 89US-00422383.
PR 11-JUN-1990; 90US-00537198.
PR 24-AUG-1990; 90US-00573616.
PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00449649.
XX (AMGE-) AMGEN INC.
XX
PI Zeebo KM, Bosselman RA, Suggs SV, Martin FH;
XX WPI; 2005-160562/17.
XX
PT Stimulating proliferation of melanocyte cells in human, involves
PT administering stem cell factor polypeptide or its biologically active
PT fragments stimulating growth of melanocyte cells, and optionally carrier,
PT to human.
XX
PS Example 3; SEQ ID NO 34; 212pp; English.
XX
CC The present invention relates to a method (M1) for stimulating
CC proliferation of melanocyte cells in a human. (M1) involves administering
CC a Stem Cell Factor (SCF) protein, or its biologically active fragments
CC that stimulates growth of melanocyte cells, and optionally a carrier, to
CC the human. The SCF is covalently conjugated to a water soluble polymer
CC e.g. polyethylene glycol. Also, the SCF is co-administered with one or
CC more other cytokines. SCF is also able to stimulate the growth of
CC primitive progenitors such as early hematopoietic progenitor cells that
CC are capable of maturing to erythroid, megakaryocyte, granulocyte, and
CC lymphocyte and macrophage cells, and non-hematopoietic stem cells such as
CC neural stem cells and primordial germ stem cells. (M1) is useful in
CC accelerating bone marrow regeneration, and in augmenting T cell
CC production. (M1) is useful for treating stem cells disorders that are
CC characterized by a reduction in functional marrow mass due to toxic,
CC radiat or immunological injury. (M1) is useful in treating AIDS,
CC aplastic anemia, paroxysmal nocturnal hemoglobinuria, myelofibrosis,
CC myelosclerosis, osteopetrosis, metastatic carcinoma, acute leukemia,
CC multiple myeloma, congestive splenomegaly, lymphoma, Gaucher's disease, Niemann
CC Pick disease, congestive splenomegaly, Kalaazar, sarcoidosis, primary
CC splenic pancytopenia, disseminated fungus disease, fulminating
CC septicemia, malaria, vitamin B12 and folic acid deficiency disease,
CC pyridoxine deficiency disease, and hypopigmentation disorders such as
CC piebaldism and vitiligo. (M1) is useful in treating infertility states,
CC intestinal damage resulting from irradiation or chemotherapy, and stem
CC cell myeloproliferative disorders such as chronic myelogenous leukemia,
CC primary thrombocythemia and acute leukemia. (M1) is useful in expanding
CC early hematopoietic progenitors in syngeneic, allogeneic or autologous
CC bone marrow transplantation, and in enhancing the efficacy of gene
CC therapy. The present sequence is a PCR primer used in an example from the
CC invention for cloning SCF.
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAAGAAAAA 2726
DB 20 CCAAAAAA 1
RESULT 958
ADZ47531/C
ID ADZ47531 standard; DNA; 20 BP.
XX
AC ADZ47531;
XX
DT 30-JUN-2005 (first entry)
XX
DE Universal PCR primer, 220-11, SEQ ID NO: 34.

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```
XX (ZSEB/) ZSEBO K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI WPI; 2005-796179/81.
XX
XX New stem cell factor antibody, useful for treating hematopoietic
PT disorders such as anemia, leukemia, lymphoma, HIV, tuberculosis, or
PT malaria.
XX
XX Example 3; SEQ ID NO 34; 217pp; English.
XX
XX The invention relates to a purified antibody that is specifically
CC immunoreactive with a stem cell factor (SCF) or SCF receptor. Also
CC described: (1) a hybridoma cell line producing a monoclonal antibody that
CC is specifically immunoreactive with a SCF protein; (2) inhibiting the
CC activity of a mast cell population; (3) decreasing blood cell
CC proliferation, maturation or activity in a in a mammal; (4) decreasing
CC the interaction between a SCF and an SCF receptor in a cell population;
CC (5) treating a mammal having a disorder mediated through the interaction
CC of SCF with an SCF receptor; and (6) a pharmaceutical composition
CC comprising an antibody specifically immunoreactive with an SCF
CC polypeptide, and a pharmaceutical carrier, excipient, or diluent. The
CC antibody and methods are useful for inhibiting the activity of a mast
CC cell population, decreasing blood cell proliferation, maturation or
CC activity in a in a mammal, decreasing the interaction between a SCF and
CC an SCF receptor in a cell population, and treating a mammal having a
CC disorder mediated through the interaction of SCF with an SCF receptor.
CC The antibody, composition, and methods are useful for treating disorders,
CC e.g. hematopoietic disorders such as anemia, leukemia, lymphoma, HIV,
CC tuberculosis, or malaria. The present sequence represents a universal
CC oligonucleotide sequence which can be used as a probe or a PCR primer in
CC the amplification and sequencing of rat and human SCF, which is used in
CC an example from the present invention.
XX
XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAAGAAAAA 2726
Db 20 CGAAAAA 1
RESULT 963
AEE01382/c
ID AEE01382 standard; DNA; 20 BP.
XX
AC AEE01382;
XX
XX 26-JAN-2006 (first entry)
XX
XX Universal oligonucleotide SEQ ID NO:32.
XX
XX antibody; stem cell factor; probe; PCR; primer; ss.
XX
XX Synthetic.
XX
XX US2005261175-A1.
XX
XX 24-NOV-2005.
XX
XX 28-JAN-2003; 2003US-00353783.
XX
XX 16-OCT-1989; 89US-00422383.
XX
XX 11-JUN-1990; 90US-00537198.
XX
XX 24-AUG-1990; 90US-00573616.
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PR 01-OCT-1990; 90US-00589701.
PR 10-APR-1991; 91US-00684535.
PR 25-NOV-1992; 92US-00982255.
PR 21-DEC-1993; 93US-00172329.
PR 24-MAY-1995; 95US-00448729.
PR 21-AUG-2000; 2000US-00643659.
XX
XX (ZSEB/) ZSEBO K M.
PA (BOSS/) BOSSELMAN R A.
PA (SUGG/) SUGGS S V.
PA (MART/) MARTIN F H.
XX
XX Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
PI WPI; 2005-796179/81.
XX
XX New stem cell factor antibody, useful for treating hematopoietic
PT disorders such as anemia, leukemia, lymphoma, HIV, tuberculosis, or
PT malaria.
XX
XX Example 3; SEQ ID NO 32; 217pp; English.
XX
XX The invention relates to a purified antibody that is specifically
CC immunoreactive with a stem cell factor (SCF) or SCF receptor. Also
CC described: (1) a hybridoma cell line producing a monoclonal antibody that
CC is specifically immunoreactive with a SCF protein; (2) inhibiting the
CC activity of a mast cell population; (3) decreasing blood cell
CC proliferation, maturation or activity in a in a mammal; (4) decreasing
CC the interaction between a SCF and an SCF receptor in a cell population;
CC (5) treating a mammal having a disorder mediated through the interaction
CC of SCF with an SCF receptor; and (6) a pharmaceutical composition
CC comprising an antibody specifically immunoreactive with an SCF
CC polypeptide, and a pharmaceutical carrier, excipient, or diluent. The
CC antibody and methods are useful for inhibiting the activity of a mast
CC cell population, decreasing blood cell proliferation, maturation or
CC activity in a in a mammal, decreasing the interaction between a SCF and
CC an SCF receptor in a cell population, and treating a mammal having a
CC disorder mediated through the interaction of SCF with an SCF receptor.
CC The antibody, composition, and methods are useful for treating disorders,
CC e.g. hematopoietic disorders such as anemia, leukemia, lymphoma, HIV,
CC tuberculosis, or malaria. The present sequence represents a universal
CC oligonucleotide sequence which can be used as a probe or a PCR primer in
CC the amplification and sequencing of rat and human SCF, which is used in
CC an example from the present invention.
XX
XX Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAAGAAAAA 2726
Db 20 CGAAAAA 1
RESULT 964
AEE0694/c
ID AEE0694 standard; DNA; 20 BP.
XX
AC AEE0694;
XX
XX 09-FEB-2006 (first entry)
XX
XX Universal stem cell factor PCR primer SEQ ID NO:32.
XX
XX hematopoiesis; stem cell factor; PCR; primer; ss.
XX
XX Synthetic.
XX
XX US6967029-B1.
XX
XX 22-NOV-2005.
```

21-AUG-2000; 2000US-00643659.

16-OCT-1989; 89US-00422383.
11-JUN-1990; 90US-00537198.
24-AUG-1990; 90US-00573616.
01-OCT-1990; 90US-00589701.
10-APR-1991; 91US-00684535.
25-NOV-1992; 92US-00982255.
21-DEC-1993; 93US-00172329.
24-MAY-1995; 95US-00449649.

(ANGE-) AMGEN INC.

Zsebo KM, Bosselman RA, Suggs SV, Martin FH;
WPI; 2006-053612/06.

Enhancing hematopoiesis in human, comprises expanding hematopoietic progenitor cells by adding stem cell factor polypeptide to cells and administering expanded cells to human.

Example 3; SEQ ID NO 32; 213pp; English.

The invention relates to a method (M1) for enhancing hematopoiesis in a human or other subject. (M1) comprises: (a) obtaining hematopoietic progenitor cells from the human or other subject; (b) expanding the cells obtained in step (a) by adding to the cell a stem cell factor (SCF) polypeptide having a 195, 208 or 245 amino acid sequence of AEE60706, AEE60708 or AEE60725, or its biological active fragments that stimulate growth of hematopoietic progenitor cells; and (c) administering to the human or other subject the expanded hematopoietic progenitor cells obtained in step (b), therefore restoring hematopoiesis to effect hematological recovery in the human or other subject and enhancing hematopoiesis in the human or other subject. Also described is a method (M2) for expanding hematopoietic progenitor cells *ex vivo*, which comprises: (a) obtaining hematopoietic progenitor cells from a donor; and (b) expanding the cells obtained in step (a) by adding to the cells the SCF polypeptide or its biological active fragments. (M1) is useful for enhancing hematopoiesis in a human or other subject. (M2) is useful for expanding hematopoietic progenitor cells, where the hematopoietic cells are chosen from stem cells, lymphoid progenitor cells, myeloid progenitor cells, megakaryocytes and erythroblasts. (M1) is useful for treating various stem cell deficiencies such as aplastic anemia, paroxymal nocturnal hemoglobinuria, myelofibrosis, myelosclerosis, Gaucher's disease, Niemann-Pick disease, Hodgkin's disease, Kala-azar, sarcoidosis, B12, and folic acid deficiency, fulminating septicemia, malaria, vitamin anemia, hypoglycemia disorders such as piebaldism and vitiligo, and AIDS. (M2) is useful in expanding early hematopoietic progenitors in syngeneic, allogeneic or autologous bone marrow transplantation. (M1) enhances hematopoiesis by expanding early hematopoietic progenitors. The present sequence represents a universal PCR primer for SCF, which is used in an example from the present invention.

Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 8.6e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATTTTTTTTTT 2726
| TTTTTTTTTTTTTTTTTT
Db 20 CCATTTTTTTTTTTTTTTTT

RESULT 965
AEE60696/c

ID AEE60696 standard; DNA; 20 BP.

XX
AC AEE60696;
XX 09-FEB-2006 (first entry)

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Db      20 CGAAAAAAAAAAAAAAAAAAAA 1

RESULT 966
AEF16083/c
ID AEF16083 standard; DNA; 20 BP.
XX
AC AEF16083;
XX
DT 09-MAR-2006 (first entry)
XX
DE Transcription modulation-related plant promoter DNA sequence SeqID71.
XX
KW plant; promoter; DNA purification; gene expression; crop improvement;
transcription; ds.
XX
OS Viridiplantae.
XX
PN US2006008816-A1.
XX
PD 12-JAN-2006.
XX
PF 04-NOV-2004; 2004US-00981334.
XX
PR 06-NOV-2003; 2003US-0518075P.
PR 04-DEC-2003; 2003US-0527611P.
XX
PA (LUYY/) LU Y.
PA (PENN/) PENNELL R.
PA (OKAM/) OKAMURO J.
PA (SCHN/) SCHNEEBERGER R.
PA (FANG/) FANG Y.
PA (KWOK/) KWOK S.
XX
PI Lu Y, Pennell R, Okamuro J, Schneeberger R, Fang Y, Kwok S;
XX
DR WPI; 2006-088582/09.
XX
PT New isolated nucleic acid molecule capable of modulating transcription,
useful for identifying promoters, control elements, or fragments to
modulate transcript levels in plants.
XX
PS Claim 1; SEQ ID NO 71; 126pp; English.
XX
CC This invention relates to a novel isolated nucleic acid molecule capable
of modulating transcription, where the nucleic acid molecule shows at
least 80 % sequence identity to a sequence listed in Table 1 of the
specification (or its complement). The nucleic acid molecule is useful
for identifying promoters, control elements, or fragments to modulate
transcript levels in plants. The present sequence is that of a plant
CC promoter DNA sequence of the invention (derived from either Arabidopsis
CC thaliana or Oryza sativa, but not clearly stated in the specification)
CC which is claimed as being capable of modulating transcription.
XX
SQ Sequence 20 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 2 Other;

Query Match      0.7%; Score 18.4; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 8.6e+02;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY      2708 TAAAAAAAAAAAAAAAAAAAAA 2727
       :|||||
Db      20 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 967
AAQ75752/c
ID AAQ75752 standard; DNA; 21 BP.
XX
AC AAQ75752;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
by digestion with restriction enzymes.

Reverse transcription primer used in cDNA analysis technique.
Analysis; gene expression; reverse transcription; primer; cDNA;
aggregate; restriction enzyme; ss.
Synthetic.
JP06303997-A.
01-NOV-1994.
16-APR-1993; 93JP-00112515.
16-APR-1993; 93JP-00112515.
(NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
WPI; 1995-018287/03.
Analysis of cDNA and gene expression - by amplification of mRNA followed
by digestion with restriction enzymes.

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XX PS Disclosure; Page 6; 11pp; Japanese.
XX CC
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAACAAAAAATAAAAAA 2726
DB 20 CTAACAAAAAATAAAAAA 1

RESULT 969
AAQ75676/c
ID AAQ75676 standard; DNA; 21 BP.
XX AC AAQ75676;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX DT
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 7; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 3 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAACAAAAAATAAAAAA 2727
DB 20 TAAACAAAAAATAAAAAA 1

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RESULT 970
AAQ75719/c
ID AAQ75719 standard; DNA; 21 BP.
XX AC AAQ75719;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX DT
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 8; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 2 A; 0 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAACAAAAAATAAAAAA 2726
DB 20 CTAACAAAAAATAAAAAA 1

RESULT 971
AAQ75778/c
ID AAQ75778 standard; DNA; 21 BP.
XX AC AAQ75778;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX DT
XX DT

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XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 21;
XX Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2706 ACTAAAAA 2725
Db 20 ACGAAAAA 1
XX
RESULT 983
AAQ75722/c
ID AAQ75722 standard; DNA; 21 BP.
AC AAQ75722;
XX 04-AUG-1995 (first entry)
DT Reverse transcription primer used in cDNA analysis technique.
DE Reverse transcription primer used in cDNA analysis technique.
XX SQ Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 21;
XX Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2706 ACTAAAAA 2725
Db 20 ACGAAAAA 1
XX
RESULT 984
AAQ75775/c
ID AAQ75775 standard; DNA; 21 BP.
AC AAQ75775;
XX 04-AUG-1995 (first entry)
DT Reverse transcription primer used in cDNA analysis technique.
DE Reverse transcription primer used in cDNA analysis technique.
XX SQ Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 21;
XX Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2709 AAAAAA 2728
Db 20 AAGAAAAA 1
XX
RESULT 985
AAQ75697/c
ID AAQ75697 standard; DNA; 21 BP.
AC AAQ75697;
XX 04-AUG-1995 (first entry)
DT Reverse transcription primer used in cDNA analysis technique.
DE Reverse transcription primer used in cDNA analysis technique.
XX SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 21;
XX Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2707 CTTAAAAA 2726
Db 20 CTTAAAAA 1
XX
```

```
RESULT 984
AAQ75775/c
ID AAQ75775 standard; DNA; 21 BP.
XX
AC AAQ75775;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18.4; DB 1; Length 21;
XX Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 2709 AAAAAA 2728
Db 20 AAGAAAAA 1
XX
RESULT 985
AAQ75697/c
ID AAQ75697 standard; DNA; 21 BP.
XX
AC AAQ75697;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
XX
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KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2726
Db 20 CTGAAAAAATAAAAAAAAAA 1

RESULT 989
AAQ75698/c
ID AAQ75698 standard; DNA; 21 BP.
XX
AC AAQ75698;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2726
Db 20 CTGAAAAAATAAAAAAAAAA 1

RESULT 989
AAQ75698/c
ID AAQ75698 standard; DNA; 21 BP.
XX
AC AAQ75698;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2726
Db 20 CTGAAAAAATAAAAAAAAAA 1

RESULT 991
AAQ75751/c
ID AAQ75751 standard; DNA; 21 BP.
XX
AC AAQ75751;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAATAAAAAAAAAA 2725
Db 20 AGTAAAAAATAAAAAAAAAA 1

RESULT 990
AAQ75751/c
ID AAQ75751 standard; DNA; 21 BP.
XX
AC AAQ75751;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2726
Db 20 CTGAAAAAATAAAAAAAAAA 1

RESULT 991

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Query Match          0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2726
DB 20 CTGAAAAAATAAAAAAAAAA 1

RESULT 994
AAQ75644/c
ID AAQ75644 standard; DNA; 21 BP.
XX
AC AAQ75644;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match          0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2705 TACTAAAAAATAAAAAAAAAA 2724
DB 20 TACAAAAAATAAAAAAAAAA 1

RESULT 995
AAQ75679/c
ID AAQ75679 standard; DNA; 21 BP.
XX
AC AAQ75679;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.

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XX Synthetic.
OS JP06303997-A.
PN
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match          0.7%; Score 18.4; DB 1; Length 21;
Best Local Similarity 95.0%; Pred. No. 8.8e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAATAAAAAAAAAA 2725
DB 20 AATAAAAAAATAAAAAAAAAA 1

RESULT 996
AAQ75774/c
ID AAQ75774 standard; DNA; 21 BP.
XX
AC AAQ75774;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of

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PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 9; l1pp; Japanese.
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. No. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2727
 DB 20 TAGAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1000
 AAQ75647/c
 ID AAQ75647 standard; DNA; 21 BP.
 XX AC AAQ75647;
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.
 DE Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX Synthetic.
 OS JP06303997-A.
 PN 01-NOV-1994.
 PD 16-APR-1993; 93JP-00112515.
 PF 16-APR-1993; 93JP-00112515.
 PR (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 PA WPI; 1995-018287/03.
 DR Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 8; l1pp; Japanese.
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX Sequence 21 BP; 0 A; 0 C; 2 G; 19 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. No. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
 DB 20 CTTAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1002
 ADK01318/c
 ID ADK01318 standard; DNA; 21 BP.
 XX AC ADK01318;
 XX 06-MAY-2004 (first entry)
 DT Rat DNA microarray capture oligonucleotide #38.
 DE ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.
 XX

Best Local Similarity 95.0%; Pred. No. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2728
 DB 20 AACAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1001
 AAQ75720/c
 ID AAQ75720 standard; DNA; 21 BP.
 XX AC AAQ75720;
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.
 DE Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX Synthetic.
 OS JP06303997-A.
 PN 01-NOV-1994.
 PD 16-APR-1993; 93JP-00112515.
 PF 16-APR-1993; 93JP-00112515.
 PR (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 PA WPI; 1995-018287/03.
 DR Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 8; l1pp; Japanese.
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX Sequence 21 BP; 3 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. No. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2726
 DB 20 CTTAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1002
 ADK01318/c
 ID ADK01318 standard; DNA; 21 BP.
 XX AC ADK01318;
 XX 06-MAY-2004 (first entry)
 DT Rat DNA microarray capture oligonucleotide #38.
 DE ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.
 XX

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OS      Rattus sp.
XX      DE10208794-A1.
XX      04-SEP-2003.
XX      28-FEB-2002; 2002DE-01008794.
XX      28-FEB-2002; 2002DE-01008794.
XX      (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX      Boekenkamp D, Dieck HT, Hoppe H;
XX      WPI; 2003-714082/68.
XX      Sorting single-stranded nucleic acid, useful for analyzing expression
XX      patterns and screening active agents, uses capture agent with variable
XX      and constant regions.
XX      Example; Page 5; 8pp; German.
XX      This invention describes a novel method for sorting single-stranded
XX      nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX      reading out, where the nucleic acids are selectively bound using capture
XX      agents that are (a) immobilised on the surface of a solid matrix and (b)
XX      comprise variable and non-variable regions. The capture oligonucleotides
XX      have a 5'-invariable anchor region, the complement of which is present at
XX      least once in each nucleic acid and a 3'-variable, discriminatory region
XX      that comprises all possible combinations of up to 10 nucleotides to allow
XX      binding of particular sorts of single stranded nucleic acids. The capture
XX      agents are particularly locked nucleic acids (LNA) and the anchor region
XX      comprises a sequence of 10-50, particularly 15-25, T residues. The
XX      capture oligonucleotides are biotinylated and immobilised on a surface by
XX      interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX      metal, resin, gel, crystalline material and/or membrane, having semi-
XX      conducting properties and especially in the form of a chip. Its surface
XX      is particularly a layer of (bio)molecular filaments and binding of single
XX      stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX      physical, stimulated by an electrical field or through a molecular sieve.
XX      The method is used (i) for analysis of patterns, especially in mucosal,
XX      hair root, blood, nerve or germ cells and (ii) for determining the
XX      activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX      additives or supplements, especially minerals, trace elements, organic
XX      acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX      mixtures. The method provides rapid, inexpensive and reproducible
XX      representation of differences in pools of nucleic acids from cells. It
XX      allows imaging of the complete pattern of all nucleic acid in a cell, and
XX      can detect very small differences in the nucleic acid pool. Since the
XX      method is based on comparison of nucleic acid pools, not individual
XX      genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX      capture probes used in the method of the invention.
XX      Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;
XX      Query Match      0.7%; Score 18.4; DB-1; Length 21;
XX      Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX      Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2707 CTAATAAAAAAAAAAAAAA 2726
DB      20 CGAAAAAAAAAAAAAAAAAAAA 1

RESULT 1003
ADK01313/c
ID      ADK01313 standard; DNA; 21 BP.
XX      ADK01313;
XX      06-MAY-2004 (first entry)
XX      Rat DNA microarray capture oligonucleotide #33.

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XX      ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX      blood; nerve; germ cell; food additive; food supplement.
XX      Rattus sp.
XX      DE10208794-A1.
XX      04-SEP-2003.
XX      28-FEB-2002; 2002DE-01008794.
XX      28-FEB-2002; 2002DE-01008794.
XX      (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX      Boekenkamp D, Dieck HT, Hoppe H;
XX      WPI; 2003-714082/68.
XX      Sorting single-stranded nucleic acid, useful for analyzing expression
XX      patterns and screening active agents, uses capture agent with variable
XX      and constant regions.
XX      Example; Page 5; 8pp; German.
XX      This invention describes a novel method for sorting single-stranded
XX      nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX      reading out, where the nucleic acids are selectively bound using capture
XX      agents that are (a) immobilised on the surface of a solid matrix and (b)
XX      comprise variable and non-variable regions. The capture oligonucleotides
XX      have a 5'-invariable anchor region, the complement of which is present at
XX      least once in each nucleic acid and a 3'-variable, discriminatory region
XX      that comprises all possible combinations of up to 10 nucleotides to allow
XX      binding of particular sorts of single stranded nucleic acids. The capture
XX      agents are particularly locked nucleic acids (LNA) and the anchor region
XX      comprises a sequence of 10-50, particularly 15-25, T residues. The
XX      capture oligonucleotides are biotinylated and immobilised on a surface by
XX      interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX      metal, resin, gel, crystalline material and/or membrane, having semi-
XX      conducting properties and especially in the form of a chip. Its surface
XX      is particularly a layer of (bio)molecular filaments and binding of single
XX      stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX      physical, stimulated by an electrical field or through a molecular sieve.
XX      The method is used (i) for analysis of patterns, especially in mucosal,
XX      hair root, blood, nerve or germ cells and (ii) for determining the
XX      activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX      additives or supplements, especially minerals, trace elements, organic
XX      acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX      mixtures. The method provides rapid, inexpensive and reproducible
XX      representation of differences in pools of nucleic acids from cells. It
XX      allows imaging of the complete pattern of all nucleic acid in a cell, and
XX      can detect very small differences in the nucleic acid pool. Since the
XX      method is based on comparison of nucleic acid pools, not individual
XX      genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX      capture probes used in the method of the invention.
XX      Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX      Query Match      0.7%; Score 18.4; DB 1; Length 21;
XX      Best Local Similarity 95.0%; Pred. No. 8.8e+02;
XX      Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      2708 TAAATAAAAAAAAAAAAAA 2727
DB      20 TGAATAAAAAAAAAAAAAAAA 1

RESULT 1004
ADK01319/c
ID      ADK01319 standard; DNA; 21 BP.
XX      ADK01319;

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CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 2 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;

Best Local Similarity 95.0%; Pred. No. 8.8e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1010

ADK01316/c

ID ADK01316 standard; DNA; 21 BP.

AC ADK01316;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #36.

KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

DE10208794-A1.

PD 04-SEP-2003.

PF 28-FEB-2002; 2002DE-01008794.

PR 28-FEB-2002; 2002DE-01008794.

PA (DEGS) DEGUSSA BIOACTIVES GMBH.

PI Boekenkamp B, Dieck HT, Hoppe H;

DR WPI; 2003-714082/68.

PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

PS Example; Page 5; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,

CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;

Best Local Similarity 95.0%; Pred. No. 8.8e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2727

Db 20 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1011

ADK01299/c

ID ADK01299 standard; DNA; 21 BP.

AC ADK01299;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #19.

KW ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

DE10208794-A1.

PD 04-SEP-2003.

PF 28-FEB-2002; 2002DE-01008794.

PR 28-FEB-2002; 2002DE-01008794.

PA (DEGS) DEGUSSA BIOACTIVES GMBH.

PI Boekenkamp D, Dieck HT, Hoppe H;

DR WPI; 2003-714082/68.

PT Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

PS Example; Page 5; 8pp; German.

CC This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface

CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. No. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2727

Db 20 TGAATAAAAAAAAAAAAAAAAAA 1

RESULT 1014

ADK01326/C

ID ADK01326 standard; DNA; 21 BP.

AC ADK01326;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #46.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 XX blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture

CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acids in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;

Best Local Similarity 95.0%; Pred. No. 8.8e+02;

Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AGAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1015

ADK01300/C

ID ADK01300 standard; DNA; 21 BP.

AC ADK01300;

DT 06-MAY-2004 (first entry)

DE Rat DNA microarray capture oligonucleotide #20.

XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

OS Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. No. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAA... 2727
 DB 20 TCAAAAAAAAAAAAAAAAAA 1

RESULT 1016
 ADK01310/c

ID ADK01310 standard; DNA; 21 BP.

XX ADK01310;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #30.

XX ss; hybridisation; capture oligonucleotide; pattern: mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.

XX Sorting single-stranded nucleic acid, useful for analyzing expression

PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.

XX Example; Page 5; 8pp; German.

XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 CC capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 0 C; 2 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. No. 8.8e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA... 2725

DB 20 ACAAAAAAAAAAAAAAAAAA 1

RESULT 1017
 ADK01311/c

ID ADK01311 standard; DNA; 21 BP.

XX ADK01311;

XX 06-MAY-2004 (first entry)

XX Rat DNA microarray capture oligonucleotide #31.

XX ss; hybridisation; capture oligonucleotide; pattern: mucosal; hair root;
 KW blood; nerve; germ cell; food additive; food supplement.

XX Rattus sp.

XX DE10208794-A1.

XX 04-SEP-2003.

XX 28-FEB-2002; 2002DE-01008794.

XX 28-FEB-2002; 2002DE-01008794.

XX (DEGS) DEGUSSA BIOACTIVES GMBH.

XX Boekenkamp D, Dieck HT, Hoppe H;

XX WPI; 2003-714082/68.
 XX Sorting single-stranded nucleic acid, useful for analyzing expression
 PT patterns and screening active agents, uses capture agent with variable
 PT and constant regions.
 XX
 XX Example; Page 5; 8pp; German.
 XX
 XX This invention describes a novel method for sorting single-stranded
 CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
 CC reading out, where the nucleic acids are selectively bound using capture
 CC agents that are (a) immobilised on the surface of a solid matrix and (b)
 CC comprise variable and non-variable regions. The capture oligonucleotides
 CC have a 5'-invariable anchor region, the complement of which is present at
 CC least once in each nucleic acid and a 3'-variable, discriminatory region
 CC that comprises all possible combinations of up to 10 nucleotides to allow
 CC binding of particular sorts of single stranded nucleic acids. The capture
 CC agents are particularly locked nucleic acids (LNA) and the anchor region
 CC comprises a sequence of 10-50, particularly 15-25, T residues. The
 CC capture oligonucleotides are biotinylated and immobilised on a surface by
 CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
 CC metal, resin, gel, crystalline material and/or membrane, having semi-
 CC conducting properties and especially in the form of a chip. Its surface
 CC is particularly a layer of (bio)molecular filaments and binding of single
 CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
 CC physical, stimulated by an electrical field or through a molecular sieve.
 CC The method is used (i) for analysis of patterns, especially in mucosal,
 CC hair root, blood, nerve or germ cells and (ii) for determining the
 CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
 CC additives or supplements, especially minerals, trace elements, organic
 CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
 CC mixtures. The method provides rapid, inexpensive and reproducible
 CC representation of differences in pools of nucleic acids from cells. It
 CC allows imaging of the complete pattern of all nucleic acid in a cell, and
 CC can detect very small differences in the nucleic acid pool. Since the
 CC method is based on comparison of nucleic acid pools, not individual
 CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
 XX capture probes used in the method of the invention.
 XX
 XX Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 18.4; DB 1; Length 21;
 Best Local Similarity 95.0%; Pred. No. 8.e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAATAAAAAAAAAA 2725
 |||||
 Db 20 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1018
 ABA93238
 ID ABA93238 standard; DNA; 22 BP.
 XX
 XX ABA93238;
 XX
 XX 18-APR-2002 (first entry)
 DT
 DE PolyA adaptor oligonucleotide SEQ ID NO:1.
 XX
 XX Detection; comparative detection; adaptor; ss.
 XX
 XX Synthetic.
 XX
 XX JP2001333800-A.
 PN
 XX 04-DEC-2001.
 PD
 XX 30-MAY-2000; 2000JP-00160324.
 PF
 XX 30-MAY-2000; 2000JP-00160324.
 PR
 XX

PA (UNIT-) UNITECH CO LTD.
 XX
 XX WPI; 2002-135950/18.
 XX
 XX Comparative detection of the amounts of RNA and DNA.
 PT
 XX
 XX Disclosure; Page 9; 9pp; Japanese.
 PS
 XX
 XX The present invention describes a method for the comparative detection of
 CC the amount of an RNA. The method comprises: (a) cDNAs obtained by
 CC transcribing respectively from at least two tissue RNAs are respectively
 CC fragmented by using a same restriction enzyme; (b) each different adaptor
 CC and a common adaptor are added to each of the cDNA fragments derived from
 CC the same or different tissues by the step (a); (c) the resultant adaptor-
 CC added cDNAs are mixed together; (d) an adaptor primer having the common
 CC sequence to said different adaptor and a gene-specific adaptor are used
 CC to amplify said adaptor-added cDNAs containing no region derived from
 CC polyadenylic acid of the mRNA before the addition of the adaptor among
 CC the adaptor-added cDNAs prepared by the step (b); (e) the ratios of the
 CC cDNA amounts are measured between the tissues; (f) the RNA is detected
 CC from the measured result; (g) each different adaptor and a common adaptor
 CC are added to each of the genomic DNA fragments derived from a same or
 CC different individuals; (h) the resultant adaptor-added genomic DNAs are
 CC mixed together; (i) the adaptor-added genomic DNAs are amplified by using
 CC a adaptor primer having the common sequence to the different adaptor and
 CC a sequence-specific adaptor; and (j) the ratios of the amplified amounts
 CC of the genomic DNAs are measured between the individuals. The method is
 CC used for the detection of the amounts of RNA and DNA. The present
 CC sequence represents an oligonucleotide which is used in the
 CC exemplification of the present invention
 XX
 XX Sequence 22 BP; 19 A; 1 C; 1 G; 1 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 18.4; DB 1; Length 22;
 Best Local Similarity 95.0%; Pred. No. 9.e+02;
 Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2727
 |||||
 Db 3 TCAAAAAAAAAAAAAAAAAAAA 22

RESULT 1019
 AAQ75028
 ID AAQ75028 standard; DNA; 23 BP.
 XX
 XX AAQ75028;
 AC
 XX 25-MAR-2003 (revised)
 DT
 DT 03-AUG-1995 (first entry)
 XX
 XX LCR oligo 2.
 DE
 XX Synthetic oligo; solid phase immunoassay; ss.
 KW
 XX Synthetic.
 OS
 XX WO9426932-A1.
 PN
 XX 24-NOV-1994.
 PD
 XX 13-MAY-1994; 94WO-US005407.
 PF
 XX 13-MAY-1993; 93US-00061694.
 PR
 XX (USSH) US DEPT HEALTH & HUMAN SERVICES.
 PA
 XX Fields HA, Khudyakov YE;
 XX
 XX WPI; 1995-006819/01.
 DR
 XX Solid phase immunoassay using oligo:nucleotide as label - also new
 XX conjugates of oligo:nucleotide coupled to antigenic peptide, partic. for
 PT

[illegible]

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Qy 2708 TAAAAAAAAAAAAAAAAAAAA 2726
   :|||||
Db 19 DAAAAAAAAAAAAAAAAAAAA 1

RESULT 1022
AAZ99489/C
ID AAZ99489 standard; DNA; 19 BP.
XX AC
XX AZ99489;
XX
XX 03-JUL-2000 (first entry)
XX
XX Primer HOOK for cDNA encoding a C-20 oxidase polypeptide.
XX
XX Gibberellic acid; copalyl diphosphate synthase; 3beta-hydroxylase;
XX 2-oxidase; phytoene synthase; C-20 oxidase; 2beta,3beta-hydroxylase;
XX seed germination; seedling growth; gibberellin biosynthetic pathway;
XX transgenic plant; hypocotyl; epicotyl; PCR primer; ss.
XX
XX Cucurbita maxima.
XX OS
XX WO300009722-A2.
XX
XX 24-FEB-2000.
XX
XX 10-AUG-1999; 99WO-US018066.
XX
XX 10-AUG-1998; 98US-0096111P.
XX PR 07-JUN-1999; 99US-0137977P.
XX
XX (MONS ) MONSANTO CO.
XX PA
XX Brown SM, Elich TD, Heck GR, Kishore GM, Logusch EW, Logusch SJ;
XX Pillar KJ, Rao S, Ream JE;
XX
XX WPI; 2000-224351/19.
XX
XX Obtaining transgenic plant useful for controlling seed germination and
XX seedling growth comprises transgene comprising a sequence expressing
XX altered levels of an essential hormone.
XX
XX Example 17; Page 262; 267pp; English.
XX
XX The present primer was used to reverse transcribe cDNA encoding a C-20
XX oxidase. The amplifie fragment is used in the method of the invention.
XX The specification describes methods for the inhibition and control of
XX gibberellic acid levels. Gibberellic acid levels may be inhibited or
XX controlled by use of a chimeric expression construct expressing a RNA or
XX protein which suppresses the gibberellin biosynthetic pathway sequence,
XX diverts substrate from the pathway, or degrades pathway substrates or
XX products. The methods uses copalyl diphosphate synthase, 3beta-
XX hydroxylase, 2-oxidase, phytoene synthase, C-20 oxidase, and a
XX 2beta,3beta-hydroxylase polynucleotides to achieve this. The method is
XX used to control seed germination and seedling growth especially to
XX regulate gene products of gibberellin biosynthetic pathway and
XX restoration of normal seed germination, in transgenic plants. The plants
XX produced are gibberellin deficient, and have shortened hypocotyl and/or
XX epicotyl phenotypes compared to normal plants
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0

Qy 2708 TAAAAAAAAAAAAAAAAAAAA 2726
   :|||||
Db 19 BAAAAAAAAAAAAAAAAAAAA 1

RESULT 1023
AAD15201/C

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XX DT 16-AUG-2001 (first entry)
XX DE Mouse total gene expression analysis (TOGA) 3' sequencing primer SEQ.92.
XX DE
XX DE Mouse; human; total gene expression analysis; TOGA; DST; EST;
XX DE digital sequence tag; expressed sequence tag; neuroleptic; antimanic;
XX DE central nervous system; antidepressant; gene therapy; diagnosis;
XX DE neuropsychiatric disorder; schizophrenia; bipolar disorder;
XX DE addition-related behaviour; chromosome identification; immune response;
XX DE PCR primer; probe; ss.
XX OS Mus musculus.
XX PN WO200130972-A2.
XX PD 03-MAY-2001.
XX PF 26-OCT-2000; 2000WO-US029690.
XX PR 26-OCT-1999; 99US-0161379P.
XX PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX PI Thomas EA, Sutcliffe JG, Pribyl TM, Hilbush B, Hasel KW;
XX PI WPI; 2001-300499/31.
XX PT New neuroleptic-regulated polynucleotides expressed in the central
XX PT nervous system for diagnosing and treating neuropsychiatric disorders
XX PT such as schizophrenia, bipolar disorder and addiction-related behavior.
XX PS Example 1; Page 87; 210pp; English.
XX CC The present invention describes isolated neuroleptic-regulated nucleic
XX CC acid molecules. (I) have neuroleptic, antimanic and antidepressant
XX CC activities, and can be used in gene therapy. (I), polypeptides (II)
XX CC encoded by (I), or a host cell (III) comprising (I), are useful for
XX CC preventing, treating, modulating or ameliorating a medical condition such
XX CC as a neuropsychiatric disorder. (I) are useful as diagnostic agents for
XX CC diagnosing a pathological condition or susceptibility to a pathological
XX CC condition such as neuropsychiatric disorder e.g. schizophrenia, a bipolar
XX CC disorder or addiction-related behaviour. (I) are useful for detecting the
XX CC presence of a nucleic acid encoding a protein in a mammalian tissue
XX CC sample. (I) can be used as probes and primers, for chromosome
XX CC identification, to control gene expression through triple helix formation
XX CC or antisense DNA or RNA, in gene therapy to treat the above mentioned
XX CC disorders, identifying individuals from minute biological samples, as an
XX CC alternative to restriction fragment length polymorphism (RFLP) and as
XX CC polymorphic markers for forensic purposes. (I) is also useful as
XX CC molecular weight markers on Southern gels, diagnostic probes for the
XX CC presence of specific mRNA in a particular cell type, as a probe to
XX CC subtract-out known sequences in the process of discovering novel
XX CC polynucleotides, for selecting and making oligomers for attachment to a
XX CC gene chip or other support, to raise anti-DNA antibodies using DNA
XX CC immunisation technique, and as an antigen to elicit an immune response.
XX CC AAH21877 to AAH21984, AAB98083 and AAB98084 represent sequences used in
XX CC the exemplification of the present invention
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
XX
Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2726
Db 19 BAAAAAATAAAAAAAAAA 1

RESULT 1025
AAF76617/c
ID AAF76617 standard; DNA; 19 BP.

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```

XX AAF76617;
XX
XX 15-MAY-2001 (first entry)
XX
XX Spearmint (-)-limonene-6-hydroxylase PCR primer SEQ ID NO: 18.
XX
XX Spearmint; peppermint; (-)-limonene-6-hydroxylase;
XX (-)-limonene-3-hydroxylase; flavour; aroma; probe; PCR primer; ss.
XX
XX Mentha spicata.
XX
XX US6194185-B1.
XX
XX 27-FEB-2001.
XX
XX 14-APR-1999; 99US-00292768.
XX
XX 24-JUN-1997; 97US-00881784.
XX
XX (UNIW ) UNIV WASHINGTON STATE RES FOUND.
XX
XX Croteau RB, Lupien SL, Karp F;
XX
XX WPI; 2001-243405/25.
XX
XX Novel isolated limonene hydroxylase encoding nucleic acid molecule,
XX useful for altering production of limonene-6-hydroxylase or limonene-3-
XX hydroxylase in suitable host cell.
XX
XX Example 4; Col 55; 57pp; English.
XX
XX The present invention provides the protein and coding sequences of the
XX peppermint and spearmint (-)-limonene-3-hydroxylase and the spearmint (-)
XX limonene-6-hydroxylase. Also provided are a number of probes and PCR
XX primers which were used to isolate the sequences. These are useful in the
XX production of transgenic plants with altered flavour and aroma
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
XX
Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2726
Db 19 DAAAAAATAAAAAAAAAA 1

RESULT 1026
AAS06525/c
ID AAS06525 standard; DNA; 19 BP.
XX
XX AAS06525;
XX
XX 07-SEP-2001 (first entry)
XX
XX Mouse microglia and macrophage regulatory gene primer #60.
XX
XX Mouse; microglia; macrophage; regulatory gene; digital sequence tag; DST;
XX PCR-based total gene expression analysis; TOGA; infectious disorder;
XX neuroinflammatory pathology; neurodegenerative disease; gene therapy;
XX hyperproliferative disorder; autoimmune; inflammatory disorder; primer;
XX ss.
XX
XX Mus musculus.
XX
XX WO200134770-A2.
XX
XX 17-MAY-2001.
XX
XX 06-NOV-2000; 2000WO-US030585.
XX

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PR 12-NOV-1999; 99WO-US026824.
PR 03-MAR-2000; 2000US-0186770P.
PR 19-JUN-2000; 2000US-0212465P.
XX
PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX
PI Carson MJ, Sutcliffe JG, Almazan MT, Tobal GM;
XX
DR WPI; 2001-308782/32.
XX
PT New regulated genes of microglia and macrophages, useful for diagnosing,
PT preventing or treating neuroinflammatory pathology and neurodegenerative
PT disease.
XX
PS Example 1; Page 88; 244pp; English.
XX
CC The present sequence represents a primer used to isolate novel mouse
CC microglia and macrophage regulatory gene DST (digital sequences tag)
CC sequences. AAS06401-AA306590 represent these novel sequences and the
CC primer sequences used to isolate them. The PCR-based total gene
CC expression analysis (TOGA) system is used to examine the expression
CC pattern of molecules corresponding to genes that are regulated in
CC unstimulated microglia, activated microglia, unstimulated macrophage and
CC activated macrophage. The polynucleotides of the invention, the
CC polypeptides encoded by them and antibodies that bind to these
CC polypeptides are useful for the diagnosis, prevention,
CC treatment or amelioration of a medical condition, preferably a
CC neuroinflammatory pathology or a neurodegenerative disease such as
CC Alzheimer's disease, senile dementia, Parkinson's disease, obsessive
CC compulsive disorders, epilepsy, schizophrenia, multiple sclerosis,
CC depression and bipolar manic-depressive disorder. The sequences and
CC methods of the invention can also be used for detecting or treating
CC infectious disorders (e.g. AIDS), hyperproliferative disorders (e.g.
CC cancer), immune disorders (e.g. severe combined immunodeficiency, SCID)
CC autoimmune diseases (e.g. insulin dependent diabetes mellitus),
CC inflammatory disorders (e.g. arthritis). The polynucleotides can be used
CC for gene therapy
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
XX
Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 19 BAAAAAAAAAAAAAAAAAAAAA 1
RESULT 1027
ABK71509/c
ID ABK71509 standard; DNA; 19 BP.
XX
AC ABK71509;
XX
30-JUL-2002 (first entry)
XX
CNS related 3' sequencing primer.
XX
Central nervous system; CNS; neuroleptic; mouse; human; psychoses;
XX neuropsychiatric disorder; psychiatric disorder; Alzheimer's disease;
XX Pick's disease; Binswanger's disease; senile dementia; encephalopathy;
XX Parkinson's disease; obsessive compulsive disorder; epilepsy; ischaemia;
XX addiction; multiple sclerosis; depression; manic-depressive disorder;
XX primer; ss.
XX
OS Synthetic.
XX
WO200226936-A2.
XX
04-APR-2002.
XX
01-OCT-2001; 2001WO-US030695.

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XX 29-SEP-2000; 2000US-0236790P.
PR 18-JAN-2001; 2001US-0263084P.
XX
PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX
PI Thomas EA, Sutcliffe JG, Pribyl TW, Hilbush BS, Hasel KW;
XX
DR WPI; 2002-383271/41.
XX
PT New polynucleotide useful in gene therapy for preventing, treating
PT modulating or ameliorating a medical condition such as psychoses or a
PT neuro psychiatric disorder e.g. schizophrenia, or a bipolar disorder in a
PT mammal.
XX
PS Example 1; Page 40; 254pp; English.
XX
CC This invention relates to the cDNA sequences of novel isolated
CC polynucleotides associated with psychoses or other neuropsychiatric
CC disorders. The sequences of the invention may act as blockers of D 2
CC receptors in the meso-limbic dopamine system. The nucleotide sequences of
CC the invention and the polypeptides encoded by them are useful in the
CC manufacture of a medicament useful for preventing, treating, modulating
CC or ameliorating a medical condition e.g. a neuropsychiatric disorder. An
CC antibody that binds the proteins of the invention is useful for
CC preventing, treating, modulating or ameliorating neurological disorders
CC such as psychoses or other neuropsychiatric disorders in a subject. The
CC sequences are also useful for diagnosing neurological disorders or a
CC susceptibility to a neurological disorder such as psychoses and other
CC neuro psychiatric disorders in a subject by determining the presence or
CC absence of mutation in the nucleotide sequence of apolipoprotein D or by
CC determining the alteration (increase or decrease) in the expression of
CC apolipoprotein D. The sequences of the invention are useful in treating
CC deficiencies or disorders of the central nervous system or peripheral
CC nervous system by activating or inhibiting the proliferation,
CC differentiation or mobilisation (chemotaxis) of neuroblasts, stem cells
CC or glial cells. The sequences are useful as a marker or detector of a
CC particular nervous system disease or disorder such as Alzheimer's
CC disease, Pick's disease, Binswanger's disease, other senile dementia,
CC Parkinson's disease, obsessive compulsive disorders, epilepsy,
CC encephalopathy, ischaemia, addiction, multiple sclerosis, depression and
CC manic-depressive disorder. The present sequence represents an
CC oligonucleotide primer used in the identification of the cDNA sequences
CC of the invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
XX
Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 19 BAAAAAAAAAAAAAAAAAAAAA 1
RESULT 1028
ABQ73231/c
ID ABQ73231 standard; DNA; 19 BP.
XX
AC ABQ73231;
XX
27-SEP-2002 (first entry)
XX
Rabbit atherosclerosis related TOGA primer SEQ ID NO:26.
XX
Rabbit; Oryctolagus cuniculus; atherosclerosis; intimal hyperplasia;
XX TOGA primer; ss.
XX
Oryctolagus cuniculus.
XX Synthetic.
XX
WO200242420-A2.

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XX PD 30-MAY-2002.
XX XX
XX PF 21-NOV-2001; 2001WO-US0440472.
XX XX
XX PR 21-NOV-2000; 2000US-0252216P.
XX XX
XX PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX PI Leonardi A, Sartani A, Glass JR, Hasel KW;
XX DR WPI; 2002-575233/61.
XX XX
XX PT New polynucleotides related to regulated genes characteristic of
XX PT atherosclerosis, useful for diagnosing, preventing, treating, modulating
XX PT or ameliorating atherosclerosis in a mammalian subject.
XX PS Disclosure; Page 28; 130pp; English.
XX CC The present invention describes an isolated polynucleotide (I) and its
XX CC complements, and degenerate variants, comprising a sequence selected from
XX CC those given in AB073206 to AB073222 (NS), which is a digital sequence tag
XX CC (DST) corresponding to mRNAs whose expression is regulated by
XX CC proliferative lesion development caused by mechanically induced intimal
XX CC hyperplasia, or by lercanidipine treatment, or by proliferative lesions
XX CC and reversed by lercanidipine treatment. (I) has antiatherosclerotic
XX CC activity and can be used in gene therapy. (I) can be used for diagnosing
XX CC a medical condition (e.g. atherosclerosis) in a subject which involves
XX CC determining the presence or absence of a mutation in (I) and diagnosing
XX CC the medical condition based on the presence or absence of the mutation.
XX CC (I) is also useful for diagnosing atherosclerosis, or the susceptibility
XX CC to atherosclerosis in a subject which involves detecting an alteration
XX CC (an increase or decrease) in amount of expression of (I). (I) is also
XX CC useful for diagnosing or monitoring the effects of treating a subject
XX CC with dihydropyridine calcium antagonist e.g., lercanidipine. (I) can also
XX CC be used for preventing, treating, modulating, or ameliorating a medical
XX CC condition such as atherosclerosis in a mammalian subject. The present
XX CC sequence represents a TOGA primer which is used in the exemplification of
XX CC the present invention
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 19 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1029
AAD34663/C
ID AAD34663 standard; DNA; 19 BP.
XX AC AAD34663;
XX XX
XX DT 16-JUL-2002 (first entry)
XX DE PCR primer #4 used for direct sequencing of TOGA generated PCR products.
XX KW Hepatitis B virus; HBV infection; chronic hepatitis; toxicity; virucide;
XX KW acute hepatitis; therapeutic; gene therapy; vaccine; infectious disease;
XX KW TOGA; Total Gene expression Analysis; PCR; primer; ss.
XX OS Unidentified.
XX XX
XX PN WO200222783-A2.
XX XX
XX PD 21-MAR-2002.
XX XX
XX PF 17-SEP-2001; 2001WO-US029123.
XX PI

15-SEP-2000; 2000US-0233176P.
(DIGI-) DIGITAL GENE TECHNOLOGIES INC.
Chisari FV, Wieland SF, Guidotti LGDVM, Mueller R, Hilbush BS;
WPI; 2002-339865/37.
Preventing and treating hepatitis viral infection in a mammal, comprises
administering nucleic acid molecules that up- or down-regulate in
hepatitis B virus infection or polypeptides encoded by the nucleic acid
molecules.
Disclosure; Page 28; 125pp; English.
The present invention relates to a method for preventing, treating,
modulating or ameliorating a medical condition. The method involves
administering one or more nucleic acid molecules up- or down-regulated in
hepatitis B virus (HBV) infection or polypeptides encoded by the nucleic
acid molecules or antibodies that bind to the polypeptide. The method is
useful for preventing, treating, modulating or ameliorating a medical
condition. It is also useful for determining the presence or absence of a
mutation in the nucleic acid molecules or detecting an alteration in
expression of the polypeptide which is useful for the diagnosis of
hepatitis viral infection. The method is useful for assessing the stage
of hepatitis viral infection (e.g., acute hepatitis versus chronic
hepatitis) or assessing the efficacy or toxicity of therapeutic treatment
for hepatitis viral infection and a gene expression profile is useful for
identifying polypeptides and polynucleotides which are associated with
hepatitis viral infection. Sequences of the invention are useful in gene
therapy and as vaccines. Nucleic acid sequences are useful as a
diagnostic markers for HBV infection and for treating infectious
diseases. The present DNA sequence is a PCR primer which is used for
direct sequencing of TOGA (Total Gene expression Analysis) generated PCR
products
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAAAAAA 2726
Db 19 BAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1030
AAD40279/C
ID AAD40279 standard; DNA; 19 BP.
XX AC AAD40279;
XX XX
XX DT 22-OCT-2002 (first entry)
XX DE HOOK PCR primer used to isolate pumpkin 2beta-3beta hydroxylase cDNA.
XX KW Gibberellin; transgenic plant; seed germination; seedling growth; GA;
XX KW transgenic; 2beta-3beta hydroxylase; enzyme; pumpkin; PCR; primer; ss.
XX OS Cucurbita pepo.
XX XX
XX PN US2002053095-A1.
XX XX
XX PD 02-MAY-2002.
XX XX
XX PF 10-AUG-1999; 99US-00371307.
XX XX
XX PR 10-AUG-1999; 99US-00371307.
XX XX
XX PA (BROW/) BROWN S M.
XX PI Brown SM, Ellich TD, Heck GR, Kishore GM, Logusch EW, Logusch SJ;

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PI Pillar KJ, Rao S, Ream JE;
 DR WPI; 2002-489107/52.
 XX
 PT Control of gibberellin levels in plants useful to avoid unfavorable
 PT conditions in crops to increase yields, using transgenic plants having
 PT reduced seed germination and early seedling growth then treatment to
 PT restore these properties.
 XX
 PS Example 19; Page 104; 155pp; English.
 XX
 CC The invention relates to control of gibberellin (GA) levels in plants.
 CC The method involves producing transgenic plants having a phenotype of
 CC reduced seed germination and reduced early seedling growth, then
 CC restoring seed germination and early seedling growth by treating plants
 CC with an appropriate compound when conditions are favourable. The method
 CC is useful to control seed germination and/or early seedling growth in
 CC agricultural production so that unfavorable environmental conditions
 CC normally reducing agronomic output can be avoided and yields increased.
 CC Plants also demonstrate increased uniformity of germination, emergence
 CC and seedling vigor, so increasing yields at harvest. The method is
 CC especially useful in crop plants such as e.g. canola, soybean, cotton,
 CC etc., and is also useful in storage and transport of seeds to reduce
 CC premature germination which may affect agronomic or food quality of the
 CC seeds. The present sequence is a PCR primer used to isolate pumpkin 2beta
 CC -3beta hydroxylase cDNA. This primer is used in the exemplification of
 CC the invention
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 2708 TAAAAAATAAAAAAAAAA 2726
 Db :|||||
 19 BAAAAAATAAAAAAAAAA 1
 RESULT 1031
 ABZ68389/c
 ID ABZ68389 standard; DNA; 19 BP.
 XX
 AC ABZ68389;
 XX
 DT 22-APR-2003 (first entry)
 XX
 DE Reverse transcription primer used to produce yeast cDNA.
 XX
 KW Histone acetyltransferase; histone deacetylase; gene expression profile;
 KW chromatin-associated protein; gene expression; primer; ss.
 XX
 OS Synthetic.
 XX
 PN W02003000715-A1.
 XX
 PD 03-JAN-2003.
 XX
 PF 21-JUN-2002; 2002WO-US019750.
 XX
 PR 22-JUN-2001; 2001US-0300135P.
 XX
 PA (CERE-) CERES INC.
 XX
 PI Dang V, Okamuro J;
 XX
 DR WPI; 2003-175280/17.
 XX
 CC New chimeric polypeptide comprising a histone acetyltransferase
 PT polypeptide segment and a segment comprising a histone deacetylase
 PT chromatin-associated protein complex subunit, useful for modulating gene
 PT expression in cells.
 XX

PS Example 10; Page 54; 85pp; English.
 XX
 CC The specification describes chimeric histone acetyltransferase
 CC polypeptides. The chimeric polypeptides comprise a polypeptide segment
 CC that exhibits histone acetyltransferase activity, and a polypeptide
 CC segment having 40% or greater sequence identity to a subunit of a histone
 CC deacetylase chromatin-associated protein complex. The chimeric
 CC polypeptides are useful for determining gene expression profiles in
 CC specific cells, for modulating gene expression in specific cells, and for
 CC making genetically modified eukaryotes. The present sequence represents a
 CC reverse transcription primer used in the method of the invention
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 2708 TAAAAAATAAAAAAAAAA 2726
 Db :|||||
 19 BAAAAAATAAAAAAAAAA 1
 RESULT 1032
 ACC79402/c
 ID ACC79402 standard; DNA; 19 BP.
 XX
 AC ACC79402;
 XX
 DT 04-AUG-2003 (first entry)
 XX
 DE M13 sequencing primer 3' primer SEQ ID NO:84.
 XX
 KW Pathological condition; ataxia telangiectasia; AT; tumour; cancer;
 KW cytostatic; vaccine; gene therapy; PCR primer; ss.
 XX
 OS Enterobacteria phage M13.
 OS Synthetic.
 XX
 PN W02003033668-A2.
 XX
 PD 24-APR-2003.
 XX
 PF 17-OCT-2002; 2002WO-US033311.
 XX
 PR 17-OCT-2001; 2001US-0330206P.
 XX
 PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
 XX
 PI Barlow C, Winrow CJ, Callahan MLA, Pankratz DG, Vibat CRT;
 PI Warren AJ;
 XX
 DR WPI; 2003-393520/37.
 XX
 XX Preventing or treating a pathological condition e.g., ataxia
 PT telangiectasia (AT), AT tumors or other cancers comprises administering
 PT polynucleotides.
 XX
 PS Example 1; Page 76; 184pp; English.
 XX
 CC The present invention describes a method for preventing or treating a
 CC pathological condition (comprising ataxia telangiectasia (AT), AT tumors
 CC or other cancers), which comprises administering to a mammalian subject
 CC at least one of: (a) a first polynucleotide comprising a sequence having
 CC 38-889 bp (consisting of the sequences in ACC79319 to ACC79392 (I)) or a
 CC second polynucleotide at least 95% identical to the first polynucleotide;
 CC (b) a third polynucleotide comprising at least 10-bp sequence that is
 CC hybridisable to the first polynucleotide under stringent conditions;
 CC (c) a gene corresponding to any of (1)-(2) or another gene at least 95%
 CC identical to the gene. (1) have cytostatic activities, and can be used in
 CC vaccines and in gene therapy. The method is useful for preventing or
 CC treating e.g., ataxia telangiectasia (AT), AT tumors or other cancers.
 CC ACC79393 to ACC79423 represent primers used in the exemplification of the

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CC present invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
    Query Match      0.7%; Score 18.2; DB 1; Length 19;
    Best Local Similarity 94.7%; Pred. No. 8.6e+02;
    Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726
Db 19 BAAAAAATAAAAAAAAAA 1

RESULT 1033
AAD49149/c
ID AAD49149 standard; DNA; 19 BP.
XX
AC AAD49149;
XX
DT 07-MAR-2003 (first entry)
XX
DE 3' sequencing primer #1 used in the invention.
XX
KW Atherosclerosis; vaccine; nervous system disorder; Alzheimer's disease;
KW Parkinson's disease; multiple sclerosis; immune disorder; gene therapy;
KW autoimmune disorder; rheumatoid arthritis; hyperproliferative disorder;
KW haemolytic anaemia; graft-versus-host disease; inflammation; infection;
KW epilepsy; Addison's disease; neoplasm; tissue regeneration; chemotaxis;
KW food additive; food preservative; primer; ss.
XX
OS Unidentified.
XX
PN WO200281726-A2.
XX
PD 17-OCT-2002.
XX
PF 15-NOV-2001; 2001WO-US043741.
XX
PR 15-NOV-2000; 2000US-0248992P.
XX
PS 28-NOV-2000; 2000US-0253623P.
XX
PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX
PI Leonardi A, Sartani A, Glass J, Sutcliffe JG, Hasel KW;
XX WPI; 2003-058561/05.
XX
PT New polypeptide associated with atherosclerosis, useful for treating
PT atherosclerosis, nervous system disorders, immune disorders,
PT hyperproliferative disorders and infectious diseases.
XX
PS Disclosure; Page 139; 146pp; English.
XX
CC The invention relates to polynucleotides and polypeptides associated with
CC atherosclerosis. Polynucleotides of the invention are useful for delivery
CC of genes, DNA vaccines, diagnostic reagents, peptides, proteins or
CC macromolecules. Sequences of the invention are useful for treating
CC nervous system disorders (e.g., Alzheimer's disease, Parkinson's disease,
CC multiple sclerosis, epilepsy), immune disorders (e.g., autoimmune
CC disorders such as rheumatoid arthritis, Addison's disease, haemolytic
CC anaemia, graft-versus-host disease, inflammation), hyperproliferative
CC disorders (e.g., neoplasms) and infectious diseases (e.g., viral,
CC bacterial, fungal or parasite infection). They are used for regeneration
CC of tissues, to repair or replace or protect damage tissues, for increasing
CC chemotaxis activity of cells, for increasing or decreasing the
CC differentiation or proliferation of embryonic stem cells from a lineage,
CC for modulating mammalian characteristics, (such as body weight or
CC height), for modulating mammalian metabolism affecting catabolism,
CC anabolism, processing utilisation and storage of energy, to change a
CC mammal's mental or physical state, or as a food additive or preservative.
CC The invention is useful in gene therapy. The present sequence is a
CC sequencing primer used in the invention

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SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
    Query Match      0.7%; Score 18.2; DB 1; Length 19;
    Best Local Similarity 94.7%; Pred. No. 8.6e+02;
    Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726
Db 19 BAAAAAATAAAAAAAAAA 1

RESULT 1034
AAD50267/c
ID AAD50267 standard; DNA; 19 BP.
XX
AC AAD50267;
XX
DT 24-MAR-2003 (first entry)
XX
DE 3' sequencing primer #1 used to illustrate the method of the invention.
XX
KW Gene expression; drug interaction mechanism; drug screening; primer;
KW genomic mapping; ss.
XX
OS Unidentified.
XX
PN WO200261045-A2.
XX
PD 08-AUG-2002.
XX
PF 01-FEB-2002; 2002WO-US002666.
XX
PR 01-FEB-2001; 2001US-00775217.
XX
PA (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX (QUAN/) QUAN J.
XX
PI Quan J, Hilbush BS, Hasel KWPD, Sutcliffe GJ, Chang HW;
PI Callahan MA;
XX
XX WPI; 2003-092784/08.
XX
PT Simplified TOGA method for simultaneous sequence-specific identification
PT of multiple mRNA molecules in mRNA population, useful for determining
PT tissue-specific patterns of gene expression or mechanisms of drug
PT interaction.
XX
PS Disclosure; Page 39; 93pp; English.
XX
CC The present invention relates to a novel simplified TOGA (RTM) method for
CC simultaneous sequence-specific identification of multiple mRNA molecules
CC in a RNA population. The method involves characterising each of the
CC sequence-specific polymerase chain reaction (PCR) products by partial
CC sequence and length. The method is useful for determining tissue-specific
CC patterns of gene expression or mechanisms of drug interaction. It is also
CC useful for drug screening, studying physiological processes, genomic
CC mapping or manufacture of diagnostic, prognostic or therapeutic reagents.
CC The present sequence is a primer used to illustrate the method of the
CC invention
XX
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
    Query Match      0.7%; Score 18.2; DB 1; Length 19;
    Best Local Similarity 94.7%; Pred. No. 8.6e+02;
    Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726
Db 19 BAAAAAATAAAAAAAAAA 1

RESULT 1035
ADC21495/c

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ID ADC21495 standard; DNA; 19 BP.
XX AC ADC21495;
XX DT 18-DEC-2003 (first entry)
XX DE Human PRDI-BF1 RT-PCR primer.
XX tumor; antigen; CD8+ cytotoxic T lymphocyte; CTL; CTL-induced lysis;
KW multiple myeloma cell; human; PRDI-BF1;
KW positive regulatory domain I-binding factor-1; MHC;
KW major histocompatibility complex Class I; cytostatic; vaccine; ss;
KW primer; PCR.
XX OS Homo sapiens.
XX PN WO2003029282-A2.
XX PD 10-APR-2003.
XX PF 24-SEP-2002; 2002WO-EP010701.
XX PR 29-SEP-2001; 2001DE-01048236.
XX PA (IMMU-) IMMUGENICS AG.
XX PI Theobald M, Lotz C;
XX DR WPI; 2003-354724/33.
XX PT New tumor-associated oligopeptide, useful particularly for treating
PT multiple myeloma, is recognized by CD8 cytotoxic T cells, also
PT derivatives and related nucleic acid.
XX PS Disclosure; Page 22; 64pp; German.
XX CC This invention describes a novel tumor-associated oligopeptide that is
CC recognized as an antigen by CD8+ cytotoxic T lymphocytes (CTL) and causes
CC CTL-induced lysis and/or apoptosis of tumor cells, especially multiple
CC myeloma cells. The oligopeptide is derived from human PRDI-BF1 (positive
CC regulatory domain I-binding factor-1) which is able to induce an MHC
CC (major histocompatibility complex) Class I allele variant A2-restricted
CC immune response of CD8+ CTL against tumor cells. The products of the
CC invention have cytostatic activity and can be used in a vaccine. The
CC peptide of the invention, also related retro-inverse and pseudopeptides,
CC fusion proteins (FP), polynucleotides, vectors, host cells and antibodies
CC and T cell receptors specific for PRDI-BF1 peptides are useful for
CC treating diseases associated with PRDI-BF1, particularly tumors. The
CC products of the invention are also useful as diagnostic, therapeutic and
CC prophylactic agents for detecting, modifying, generating, expanding
CC and/or regulating activation and functional status of T cells, and for
CC preparation of poly- or mono-clonal or recombinant A2-restricted T cell
CC receptors and their functional equivalents. This sequence represents an
CC RT-PCR primer used to amplify the human PRDI-BF1 gene described in the
XX invention.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA... 2726
Db 19 BAAAAA... 1

RESULT 1036
ADF74670
ID ADF74670 standard; DNA; 19 BP.
XX AC ADF74670;
XX
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DT 26-FEB-2004 (first entry)
XX DNA oligo (30) used in preparing a library of same length signatures.
DE ss; tag-DNA signature; adapter-signature-adapter; parallel sequencing;
XX genomic mapping; genetic identification; medical diagnostic.
XX Unidentified.
XX WO2003091416-A2.
XX PN 06-NOV-2003.
XX PD 25-APR-2003; 2003WO-US013076.
XX PF 26-APR-2002; 2002US-0375782P.
XX PR (LYNX-) LYNX THERAPEUTICS INC.
XX PA Fischer A, Hiemisch H, Williams S, Brenner S, Walker R;
XX PI Vermaas E, Fu R;
XX DR WPI; 2003-865585/80.
XX PT Preparing a library of same-length signature sequences from a source
PT nucleic acid population by ligating to the cleaved ends, a second adapter
PT containing a recognition and cleavage site for a second restriction
PT endonuclease.
XX PS Disclosure; Fig 2a; 54pp; English.
XX CC This invention relates to a novel method for preparing a library of same-
XX length signature sequences from a source nucleic acid population.
XX Specifically, it comprises producing solid phase cloned libraries of
XX oligonucleotide tag-DNA signature sequence constructs, which are useful
XX for sequencing many polynucleotides simultaneously. The present invention
XX describes a kit for the construction of adapter-signature-adapter
XX constructs using 'first' and 'second' adapters each containing a specific
XX restriction endonuclease recognition site, and which flanks the same
XX length signature sequence. As such, using the method described herein it
XX is possible to do parallel sequencing of large populations of
XX polynucleotides for genomic mapping, genetic identification and medical
XX diagnostics. This oligonucleotide sequence is a DNA oligo involved in the
XX step wise process of preparing a library of same length signature
XX sequences from restriction fragments in an exemplification of the
XX invention.
XX SQ Sequence 19 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 0.7%; Score 18.2; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 8.6e+02;
Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA... 2726
Db 1 BAAAAA... 19

RESULT 1037
ADL24850/c
ID ADL24850 standard; DNA; 19 BP.
XX AC ADL24850;
XX DT 20-MAY-2004 (first entry)
XX DE Intestinal epithelium/peyer's patch M cell-related primer #15.
XX intestinal epithelium cell development; peyer's patch M cell development;
KW inflammatory bowel disease; gluteoenteropathy; infectious disease;
KW autoimmune disease; haemolytic anaemia; rheumatoid arthritis; dermatitis;
KW Grave's disease; multiple sclerosis; allergy; asthma; diabetic mellitus;
KW immune system disorder; hypersensitivity; anaphylaxis;
```

KW blood group incompatibility; ss; PCR; primer.
 XX Unidentified.
 XX
 PN WO200208052-A2.
 XX
 PD 17-OCT-2002.
 XX
 XX 04-APR-2002; 2002WO-US010873.
 PF
 XX 04-APR-2001; 2001US-0281416P.
 PR
 XX (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
 PA
 XX Brayden DJ, Byrne D, O'mahony DJ, Evans CF, Mah SP, Lo DD;
 PI WPI; 2003-075470/07.
 XX
 XX Novel isolated or purified polypeptide encoded by genes associated with
 PT intestinal epithelium or M cell development, differentiation or function,
 PT useful for treating autoimmune diseases and infectious diseases.
 XX
 XX Disclosure; SEQ ID NO 360; 152pp; English.
 PS
 XX The invention comprises DNA sequences which are associated with
 CC intestinal epithelium and Peyer's patch M cells. The DNA sequences of the
 CC invention are useful for assessing, modifying, modulating or regulating
 CC intestinal epithelium or M cell development. The DNA sequences of the
 CC invention are also useful in the treatment of: inflammatory bowel
 CC disease, gluten enteropathy, infectious diseases, autoimmune diseases
 CC (e.g. haemolytic anaemia, rheumatoid arthritis, dermatitis, Grave's
 CC disease, multiple sclerosis, allergy, asthma and diabetic mellitus),
 CC diseases or disorders of the immune system, hypersensitivity,
 CC anaphylaxis, and blood group incompatibility. The present DNA sequence
 CC represents a primer that was used in the exemplification of the
 CC invention.
 XX
 XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 SQ
 Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 2708 TAAAAA AAAAAAAAAAAAAA 2726
 Db 19 BAAAAA AAAAAAAAAAAAAA 1
 :|||||
 RESULT 1038
 ADY39466/c
 ID ADY39466 standard; DNA; 19 BP.
 XX
 AC ADY39466;
 XX
 DT 19-MAY-2005 (first entry)
 XX
 DE RT-PCR primer used to amplify yeast clone-derived plasmid RNA.
 KW plant growth regulant; plant; agriculture; plant breeding;
 KW transgenic plant; flowering; ss; RT-PCR; primer;
 KW reverse transcriptase PCR.
 XX
 XX Synthetic.
 OS
 XX WO2005019462-A1.
 PN
 XX
 PD 03-MAR-2005.
 XX
 XX 18-AUG-2003; 2003WO-US025997.
 PF
 XX 18-AUG-2003; 2003WO-US025997.
 PR
 XX (CERE-) CERES INC.
 FA

XX Feldman K, Pennell R, Kwok S, Dang V, Zhang H;
 PI WPI; 2005-214253/22.
 DR
 XX New isolated nucleic acids and polypeptides from Arabidopsis, Maize, or
 PT Brassica, useful for generating transgenic plants having increased size,
 PT increased number and size of rosette leaves and are late-flowering.
 XX
 XX Disclosure; Page 63; 151pp; English.
 PS
 XX The invention relates to a novel isolated nucleic acid molecule from
 CC Arabidopsis, Maize, or Brassica and encoding an amino acid sequence
 CC exhibiting at least 85% sequence identity to SEQ ID NO. 3, 5, 7, 10, 12,
 CC 14, 17, 19, 21, 24, 26, 28, 31, 34, 36, 38, 41, 43, 45, 48, or 49 as
 CC given in the specification. The nucleic acids and polypeptides of the
 CC invention may act as plant growth regulators and as such may be useful
 CC for generating transgenic plants having increased size, increased number
 CC and size of rosette leaves and are late-flowering. The current sequence
 CC is that of the RT-PCR primer of the invention which was used to amplify
 CC yeast clone-derived plasmid RNA.
 XX
 XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 SQ
 Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 2708 TAAAAA AAAAAAAAAAAAAA 2726
 Db 19 BAAAAA AAAAAAAAAAAAAA 1
 :|||||
 RESULT 1039
 ADZ66610/c
 ID ADZ66610 standard; DNA; 19 BP.
 XX
 AC ADZ66610;
 XX
 DT 30-JUN-2005 (first entry)
 XX
 DE Non-viable seed-producing transgenic plant-related-oligo(dt)18 primer.
 XX
 KW transgenic plant; seed; artificial seed; PCR; primer; ss.
 XX
 XX Synthetic.
 OS
 XX WO2005035763-A1.
 PN
 XX
 PD 21-APR-2005.
 XX
 PF 17-SEP-2003; 2003WO-US029054.
 XX
 PR 17-SEP-2003; 2003WO-US029054.
 XX
 XX (CERE-) CERES INC.
 PA
 XX Feldman K, Nadzan G, Zhang H, Alexandrov N;
 PI WPI; 2005-315565/32.
 XX
 XX Novel polypeptide having characteristic of being lethal or non-viability
 PT polypeptide, useful for producing transgenic plants that produce seeds
 PT that are not viable, not fertile, and are not capable of germinating.
 XX
 XX Disclosure; Page 56; 389pp; English.
 PS
 XX The invention comprises the amino acid and coding sequences of lethal or
 CC non-viable proteins. The DNA and protein sequences of the invention are
 CC useful for transforming a plant cell, and producing transgenic plants
 CC that produce seeds that are not viable, not fertile, not capable of
 CC germinating, or are otherwise not capable of growing into mature plants.
 CC The present DNA sequence represents an oligo(dt)18 primer that was used

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XX 23-SEP-2004; 2004US-00950095.
 PF 23-SEP-2003; 2003US-0505420P.
 PR (CERE-) CERES INC.
 PA Alexandrov N, Zhihong C, Fang Y, Feldmann K, Kiegle EA, Kwok S;
 PI Lu Y, Penell R, Schneeberger R, Wu C;
 XX WPI; 2005-683371/70.
 DR
 XX New nucleotide sequences, useful modifying plant characteristics or for
 PT modulating and manipulating growth, development, and biochemistry of a
 PT plant.
 XX Disclosure; SEQ ID NO 73; 132pp; English.
 PS
 XX The present invention relates to polynucleotides and their encoding
 CC polypeptides with the use of those products for making transgenic plants.
 CC The sequences of the invention are useful modifying plant characteristics
 CC or for modulating and manipulating growth, development and biochemistry
 CC of a plant. The invention is useful for producing plants with increased
 CC yield of biomass or chemical components, in particular food and
 CC reproducible raw materials. The present sequence is a d(T)18 primer used
 CC to generate probes for hybridization. This sequence is used in making
 CC transgenic plants.
 XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 SQ
 Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2726
 DB :|||||
 19 BAAAAAATAAAAAAAAAA 1
 RESULT 1043
 AED60795/C
 ID AED60795 standard; DNA; 19 BP.
 XX
 AC AED60795;
 XX
 DT 29-DEC-2005 (first entry)
 XX
 DE Synthetic primer #1.
 XX
 KW Transcription; vector; primer; ss.
 XX
 OS Synthetic.
 XX
 PN US2005246785-A1.
 XX
 PD 03-NOV-2005.
 XX
 PF 30-SEP-2004; 2004US-00957569.
 XX
 PR 14-OCT-2003; 2003US-0511460P.
 PR 06-NOV-2003; 2003US-0518075P.
 PR 04-DEC-2003; 2003US-0527611P.
 PR 13-FEB-2004; 2004US-0544771P.
 XX
 XX (CERE-) CERES INC.
 PA Cook Z, Fang Y, Feldmann K, Kiegle EA, Kwok S, Lu Y, Medrano L;
 PI Penell R, Schneeberger R, Wu C;
 XX WPI; 2005-733852/75.
 DR
 XX New isolated promoter sequences and promoter control elements, useful for
 PT modulating transcription of a desired polynucleotide in plants.
 PT

XX Disclosure; SEQ ID NO 1; 787pp; English.
 PS
 XX The invention relates to an isolated nucleic acid molecule capable of
 CC modulating transcription, where the nucleic acid molecule shows at least
 CC 80% sequence identity to one of the promoter sequences given in the
 CC specification or its complement. The invention also relates to a vector
 CC construct comprising a first nucleic acid molecule capable of modulating
 CC transcription, where the nucleic acid molecule shows at least 80%
 CC sequence identity to one of the promoter sequences given in the
 CC specification, and a second nucleic acid molecule having to be transcribed, where
 CC the first and second nucleic acid molecules are heterologous to each
 CC other and are operably linked together, a host cell comprising the
 CC nucleic acid, where the nucleic acid molecule is flanked by an exogenous
 CC sequence or comprising the vector construct, a method of modulating
 CC transcription and a plant comprising the vector construct. The first
 CC nucleic acid molecule is capable of modulating transcription during the
 CC developmental times, in response to a stimulus or in a cell tissue or
 CC organ as given in the specification, where the first nucleic acid
 CC molecule is inserted into a plant cell and the plant cell is regenerated
 CC into a plant. The nucleic acid molecules, which are promoter sequences,
 CC and promoter control elements are useful for modulating transcription of
 CC a desired polynucleotide in plants. This sequence represents a synthetic
 CC primer used in the scope of the invention.
 XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 SQ
 Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2726
 DB :|||||
 19 BAAAAAATAAAAAAAAAA 1
 RESULT 1044
 AED87374/C
 ID AED87374 standard; DNA; 19 BP.
 XX
 AC AED87374;
 XX
 DT 12-JAN-2006 (first entry)
 XX
 DE Plant promoter associated primer.
 XX
 KW plant; transgenic plant; herbicide resistance; ss; primer.
 XX
 OS Unidentified.
 XX
 PN WO2005104823-A2.
 XX
 PD 10-NOV-2005.
 XX
 PF 25-APR-2005; 2005WO-US014265.
 XX
 PR 23-APR-2004; 2004US-0564658P.
 PR 23-APR-2004; 2004US-0564678P.
 XX
 PA (CERE-) CERES INC.
 XX
 PI Kwok S;
 XX
 DR WPI; 2005-769438/78.
 XX
 PT Novel isolated nucleic acid molecule comprising plant promoter sequence,
 PT useful as shade responsive promoter for modulating transcription of
 PT desired plant and for producing plants having shade responsive
 PT characteristics.
 XX
 PS Disclosure; SEQ ID NO 1; 157pp; English.
 XX
 XX The invention relates to an isolated nucleic acid molecule (I),
 CC

CC comprising a plant promoter sequence. (I) is useful for producing a
 CC transformed plant having shade responsive characteristics different from
 CC those of a naturally occurring plant of the same species cultivated under
 CC the same conditions, which involves introducing (I) into a plant or plant
 CC cell to modulate transgene expression in a plant. (I) is useful for expressing a
 CC structural DNA sequence in a plant. (I) is useful for understanding
 CC developmental mechanisms e.g. shade responsive promoters that are induced
 CC during callus formation and somatic embryo formation, and for isolating
 CC trans-acting factors. (I) is also useful for modulating transcription in
 CC most cells of an organism under most environment conditions e.g. for
 CC modulating genes involved in defense, pest resistance, herbicide
 CC resistance etc. The present sequence represents a plant promoter
 CC associated primer.

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 2708 TAAAAAATAAAAAAAAAA 2726
 Db 19 BAAAAAATAAAAAAAAAA 1

RESULT 1045
 AEF26613/C
 ID AEF26613 standard; DNA; 19 BP.

AC AEF26613;
 DT 23-MAR-2006 (first entry)
 DE Oligo(dT)18 primer.
 KW ss; primer; transgenic plant.
 XX Synthetic.

PN US2006015970-A1.
 XX 19-JAN-2006.
 XX 09-DEC-2004; 2004US-00010239.
 XX 12-DEC-2003; 2003US-0529352P.
 XX (CERS-) CERS INC.

PA Pennell R, Okamuro J, Schneberger R, Fang Y, Kwok S, Jofuku D;
 PI Kiegle EA, Donson J, Apuya N;
 XX WPI; 2006-099536/10.

XX New nucleic acid molecule, useful in producing transgenic plants for use
 PT as models for modifying plant characteristics e.g. increase in plant
 PT height, number or size of leaves, or wood products.

PS Example 1; SEQ ID NO 132; 245pp; English.

XX The present invention relates to isolated nucleic acid molecules from
 CC Arabidopsis thaliana and the polypeptides encoded by them. The patentees
 CC also claim a vector construct containing such nucleic acid molecules, and
 CC a host cell transformed; a method for detecting a nucleic acid in a
 CC sample; and a plant, plant cell, plant material or seed of a plant which
 CC comprises the nucleic acid molecule which is exogenous or heterologous to
 CC the plant or plant cell. The vector construct comprises a first nucleic
 CC acid having a regulatory sequence capable of causing transcription and/or
 CC translation in a plant and a second nucleic acid having the sequence of
 CC the isolated nucleic acid molecule. The first and second nucleic acids
 CC are operably linked and where the second nucleic acid is heterologous to
 CC any element in the vector construct. The isolated nucleic acid molecules
 CC are useful in producing transgenic plants for use as models for modifying

CC plant characteristics, e.g. increase in plant height, number or size of
 CC leaves, or wood products. The present sequence is that of a primer used
 CC in generation of labeled probes from first-stand cDNA.

SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

Query Match 0.7%; Score 18.2; DB 1; Length 19;
 Best Local Similarity 94.7%; Pred. No. 8.6e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 2708 TAAAAAATAAAAAAAAAA 2726
 Db 19 BAAAAAATAAAAAAAAAA 1

RESULT 1046
 AAZ09197/C
 ID AAZ09197 standard; DNA; 20 BP.

AC AAZ09197;
 DT 19-OCT-1999 (first entry)
 DE Oligonucleotide 9 for DNA analysis.
 KW Primer; DNA analysis; amplification; hybridisation; ss.
 XX Synthetic.

PN JP11196874-A.
 XX 27-JUL-1999.
 XX 14-JAN-1998; 98JP-00005399.
 XX 14-JAN-1998; 98JP-00005399.
 XX (HITA) HITACHI LTD.
 XX WPI; 1999-496652/42.

XX Analysis of DNA fragment - comprises addition of known common
 PT oligonucleotide, amplification of resultant DNA fragment and analysis and
 PT labelling of amplified DNA.

PS Example 5; Page 12; 17pp; Japanese.

XX This invention describes a novel method for the analysis of a DNA fragment
 CC which comprises: (i) addition of a known common oligonucleotide sequence
 CC to at least one terminal of each DNA fragment. (ii) amplification of the
 CC resultant DNA fragment as a primer using a first common primer containing
 CC a complementary nucleotide sequence to the above mentioned known common
 CC oligonucleotide sequence, a second common primer containing a
 CC complementary nucleotide sequence to the prepared known common
 CC oligonucleotide sequence optionally having been introduced with
 CC complementary nucleotide sequence at a terminal, and a specific primer
 CC capable of hybridisation with a DNA fragment containing whole or part of
 CC the gene having known sequence, to give amplified DNA, (iii) analysis of
 CC the amplified DNA to find the information of the DNA fragment, in which
 CC the specific primer is designed to prepare fragments of the common first
 CC and second primers and to give short fragments of amplified DNA and (iv)
 CC labelling them to make their differentiation. Differentiation of
 CC informations of known and unknown genes readily provides information of
 CC unknown gene and simultaneous monitoring of signals derived from minor
 CC genes. Furthermore, labelling of DNAs according to functions of known
 CC genes can be performed. AAZ09189-209201 represent oligonucleotide primers
 CC used to illustrate the method of the invention

SQ Sequence 20 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 2 Other;

Query Match 0.7%; Score 18.2; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 8.9e+02;
 Matches 18; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY	2708	TAATAAAAAAAAAAAAAA	2726
DB	19	BAAAAAAAAAAAAAAAAAA	1
RESULT 1047			
AAQ34110			
ID	AAQ34110	standard; DNA; 18 BP.	
XX			
AC	AAQ34110;		
XX			
DT	25-MAR-2003	(revised)	
DT	02-FEB-1993	(first entry)	
XX			
DE	Sequence of a microsatellite from clone TGLA60B.		
XX			
XX	PCR; selection; primers; OPTIPRIM; breeding; cattle; parentage;		
KW	genetic mapping; traits; amplification; ss.		
XX			
OS	Bos taurus.		
XX			
PN	WO9213102-A1.		
XX			
PD	06-AUG-1992.		
XX			
PF	15-JAN-1992;	92WO-US000340.	
XX			
PR	15-JAN-1991;	91US-00642342.	
XX			
PA	(GENM-) GENMARK.		
XX			
PI	Georges M, Massey JM;		
XX			
XX	WPI; 1992-284684/34.		
XX			
PT	Polymorphic bovine DNA markers - used in genetic identification, gene		
PT	mapping, and selective breeding.		
XX			
PS	Table 7; Page 375; 517pp; English.		
XX			
CC	The sequence is that of a bovine microsatellite sequence obtd. by		
CC	screening a library of bovine MboI DNA fragments of between 250 and 500		
CC	bp with an (AC) ₁₅ and a (TC) ₁₅ oligonucleotide probe. One out of 50		
CC	clones cross-hybridised. Assuming independent distribution of		
CC	microsatellites and MboI sites, the frequency of (T) ₆ n > 9 microsatellites		
CC	in the bovine genome is estimated at >100, 000. The sequence information		
CC	for ca. 230 such bovine microsatellites is summarised in the		
CC	specification and indexed herein (see below). The sequences upstream and		
CC	downstream of the microsatellite sequence were used to generate the		
CC	required PCR primers for in vitro amplification of the corresp.		
CC	microsatellite (using the program OPTIPRIM). The microsatellites may be		
CC	used to identify individuals, for parentage testing, and in the genetic		
CC	mapping of economic trait loci, or genes involved the determinism of		
CC	economically important traits esp. in cattle, to allow selective		
CC	breeding. See also AAQ33501-34437. (Updated on 25-MAR-2003 to correct PN		
CC	field.)		
XX			
SQ	Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;		
	Query Match	0.7%; Score 18; DB 1; Length 18;	
	Best Local Similarity	100.0%; Pred. No. 8.7e+02;	
	Matches	18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
QY	2709	AAAAAAAAAAAAAAAAA	2726
DB	1	AAAAAAAAAAAAAAAAA	18
RESULT 1048			
AAQ75025/c			
ID	AAQ75025	standard; RNA; 18 BP.	
XX			

XX Synthetic.
 XX WO9732023-A1.
 XX PD 04-SEP-1997.
 XX PF 28-FEB-1997; 97WO-AU000124.
 XX PR 01-MAR-1996; 96AU-00008386.
 XX PA (FLOR-) FLORIGENE LTD.
 XX PI Brugliera F, Holton TA, Michael MZ;
 XX WPI; 1997-448691/41.
 XX Novel flavonoid 3'-hydroxylase(s) from flowering plants - and
 PT corresponding DNA, used in the manipulation of pigmentation in plants.
 XX Example 15; Page 59; 234pp; English.
 XX Anchored poly(T) oligonucleotides polyT-anchA (AAT94667), polyT-anchC
 CC (AAT94668) and polyT-anchG (AAT94669) are complementary to the upstream
 CC region of a polyadenylation sequence. They were used to prime cDNA
 CC synthesis from snapdragon (Antirrhinum majus) petal and leaf RNA, and
 CC were also utilised in the PCR amplification of plant cytochrome P450
 CC sequences (see also AAT94670-73). A cDNA clone (see AAT94657) encoding
 CC flavonoid 3' hydroxylase (see AAW35704) was isolated using a differential
 CC display approach. This can be used to manipulate the pigmentation of
 CC transgenic plants
 XX Sequence 18 BP; 1 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAA 2725
 Db |||||
 18 TAAAAAAAAAAAAAAAAA 1
 RESULT 1050
 AAV21970/c
 ID AAV21970 standard; DNA; 18 BP.
 AC AAV21970;
 XX 14-JUL-1998 (first entry)
 DT Nuclease resistant antisense oligo NBT 13 targeted against (T)18.
 DE Nuclease resistant; bacterial infection; antibiotic; target;
 KW veterinary medicine; treatment; human; industrial process;
 KW bacterial control; ss.
 XX Synthetic.
 XX WO9803533-A1.
 PN 29-JAN-1998.
 PD 23-JUL-1997; 97WO-US012961.
 XX 24-JUL-1996; 96US-00685575.
 PR (OLIG-) OLIGOS ETC & OLIGOS THERAPEUTICS INC.
 XX Arrow A, Dale RMK, Thompson TL;
 PI WPI; 1998-120687/11.
 XX

PT Treating bacterial infections in humans or animals with
 PT oligonucleotide(s) - resistant to nuclease and targeted to bacterial
 PT nucleic acid or proteins, also conjugates of these oligo:nucleotide(s)
 XX with antibiotics.
 XX Claim 49; Page 87; 163pp; English.
 XX This antisense oligonucleotide is nuclease resistant and can be used in
 CC the treatment of animals, including humans, having a bacterial infection.
 CC The treatment comprises administration of such nuclease resistant
 CC oligonucleotides, targeted to a nucleic acid or protein of the bacterium,
 CC and formulated with a carrier. A compound comprising this nuclease
 CC resistant oligonucleotide can be covalently linked to an antibiotic. The
 CC method is used to treat infections by a wide variety of Gram-positive and
 CC Gram-negative, or acid-fast, bacteria, in human and veterinary medicine.
 CC The methods are particularly used in immuno-compromised individuals (e.g.
 CC patients with acquired immunodeficiency syndrome or those receiving
 CC chemotherapy or radiation therapy), optionally in combination with, or
 CC fused to, antiviral or other antimicrobial oligonucleotides. Apart from
 CC therapeutic use, the oligonucleotides can be used to control bacteria in
 CC laboratory cultures, foods, beverages and industrial processes. The
 CC oligonucleotides are specific for bacteria, without affecting metabolism
 CC in mammalian cells. They may also activate RNase H and have a general,
 CC non-specific immune-stimulating effect. The oligonucleotides can be
 CC administered orally, intranasally, rectally, topically or by injection,
 CC optionally coupled to an agent (e.g. carbohydrate or polyamine) that
 CC enhances cellular uptake
 XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 Db |||||
 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1051
 AAX19943/c
 ID AAX19943 standard; DNA; 18 BP.
 XX AAX19943;
 AC 14-JUN-1999 (first entry)
 DT Primer SEQ ID NO:3 from JP11075880.
 DE Primer; oligonucleotide; labelling; detection; self-priming; PCR; ss.
 KW Synthetic.
 OS JP11075880-A.
 XX 23-MAR-1999.
 PD 10-JUL-1998; 98JP-00195719.
 PF 14-JUL-1997; 97JP-00205378.
 PR (KAGA) ZH KAGAKU & KESSEI RYOHO KENKYUSHO.
 XX WPI; 1999-257710/22.
 DR Labelling of an oligonucleotide - useful for detecting genes.
 PT Example 1; Page 7; 10pp; Japanese.
 XX A method has been developed for labelling an oligonucleotide having a
 CC repeated sequence of (X)n (where X and Y consists of a combination of
 CC adenine and thymine or uracil or guanine and cytosine, and n is an
 CC integer of 1 or more) at the 3'-terminal side in which the repeated
 CC

CC sequence is added and extended using a labelled body of the nucleotide
CC constituting the repeated sequence and a DNA polymerase lacking in 5' to
CC 3' exonuclease activity. The method can be used for detecting a gene. The
CC method can detect a gene in a sensitivity up to ten times higher than
CC prior art methods. The present sequence represents a primer used in an
CC example from the present invention

XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
| | | | | | | | | | | | | | | | | |
Db 18 AAAAAAAAAAAAAAAAAA 18

RESULT 1052
AAAX19942
ID AAX19942 standard; DNA; 18 BP.
XX
AC AAX19942;
XX
DT 14-JUN-1999 (first entry)
XX
DE Primer SEQ ID NO:2 from JP11075880.
XX
KW Primer; oligonucleotide; labelling; detection; self-priming; PCR; ss.
XX
OS Synthetic.

XX JP11075880-A.
XX 23-MAR-1999.
XX 10-JUL-1998; 98JP-00195719.
XX 14-JUL-1997; 97JP-00205378.
XX (KAGA) ZH KAGAKU & KESSEI RYOHO KENKYUSHO.
XX WPI; 1999-257710/22.
XX
XX Labelling of an oligonucleotide - useful for detecting genes.

XX Example 1; Page 7; 10pp; Japanese.
XX
XX A method has been developed for labelling an oligonucleotide having a
XX repeated sequence of (XY)_n (where X and Y consists of a combination of
XX adenine and thymine or uracil or guanine and cytosine, and n is an
XX integer of 1 or more) at the 3'-terminal side in which the repeated
XX sequence is added and extended using a labelled body of the nucleotide
XX constituting the repeated sequence and a DNA polymerase lacking in 5' to
XX 3' exonuclease activity. The method can be used for detecting a gene. The
XX method can detect a gene in a sensitivity up to ten times higher than
XX prior art methods. The present sequence represents a primer used in an
XX example from the present invention

XX
SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
| | | | | | | | | | | | | | | | | |
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1053
AAZ87161
ID AAZ87161 standard; RNA; 18 BP.

XX AAZ87161;
AC
XX 08-MAY-2000 (first entry)
XX
XX Oligoarabinonucleotide SEQ ID NO:2.
XX
KW Beta-D-arabinose; antisense; inhibition; transcription; expression;
KW reverse transcription; viral replication; RNase H cleavage;
KW triple helix formation; ss.
XX
OS Synthetic.

XX
FH Key Location/Qualifiers
FT modified_base 1..18
FT /tag= a
FT /note= "Ribose moiety replaced by beta-D-arabinose"

XX WO9967378-A1.
XX
XX 29-DEC-1999.
XX
XX 17-JUN-1999; 99WO-CA000571.
XX
XX 19-JUN-1998; 98CA-02241361.
XX
XX (UYMC-) UNIV MCGILL.
XX
XX Damha MJ, Patniak WA, Noronha AM, Wilds C, Borkow G, Arion D;
XX WPI; 2000-160584/14.

XX
XX Therapeutic composition containing antisense oligonucleotides that
XX include arabinose sugars, particularly for inhibiting viral replication.
XX
XX Example 1; Page 29; 91pp; English.

XX
XX The invention relates to a new composition for selective, sequence-
XX specific inhibition of gene transcription and expression in a host. The
XX composition comprises oligonucleotides containing arabinose sugars that
XX can hybridise to either a single-stranded (ss) RNA to induce RNase H
XX cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple
XX helix, thereby inhibiting DNA replication and/or transcription. The
XX oligoarabinonucleotides are used for antisense inhibition of gene
XX expression or to prevent DNA replication, or reverse transcription of RNA
XX by retroviruses. The compositions are therefore particularly used to
XX inhibit retroviral replication. The oligoarabinonucleotides can also be
XX used, in combination with RNase H, as reagents for sequence-specific
XX cleavage or RNA mapping, and additionally for the study and control of
XX gene expression in cells. The oligoarabinonucleotides have excellent
XX affinity for RNA, increased resistance to cellular or serum proteins. They target ss
XX any non-specific binding to cellular or serum proteins. They target ss
XX RNA, but not complementary ss DNA, so may be useful for targeting
XX retroviral genomic RNA to inhibit the early stages of viral replication.
XX Oligoarabinonucleotides containing pyrimidine bases form triple helices
XX with significantly higher thermal stability than those produced by normal
XX oligonucleotides. Sequences AAZ87160-287164 represent
XX oligoarabinonucleotides containing beta-D-arabinose used in an
XX exemplification of the present invention

XX
SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
| | | | | | | | | | | | | | | | | |
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1054
AAZ87162/c

AAZ87162 standard; RNA; 18 BP.
 AAZ87162;
 08-MAY-2000 (first entry)
 Oligoarabinonucleotide SEQ ID NO:3.
 Beta-D-arabinose; antisense; inhibition; transcription; expression;
 reverse transcription; viral replication; RNase H cleavage;
 triple helix formation; ss.
 Synthetic.
 Key Location/Qualifiers
 modified_base 1..18
 /*tag= a
 /note= "Ribose moiety replaced by beta-D-arabinose"
 WO9967378-A1.
 29-DEC-1999.
 17-JUN-1999; 99WO-CA000571.
 19-JUN-1998; 98CA-02241361.
 (UYMC-) UNIV MCGILL.
 Damha MJ, Parniak MA, Noronha AM, Wilds C, Borkow G, Arion D;
 WPI; 2000-160584/14.
 Therapeutic composition containing antisense oligonucleotides that
 include arabinose sugars, particularly for inhibiting viral replication.
 Example 1; Page 29; 91pp; English.
 The invention relates to a new composition for selective, sequence-
 specific inhibition of gene transcription and expression in a host. The
 composition comprises oligonucleotides containing arabinose sugars that
 can hybridize to either a single-stranded (ss) RNA to induce RNase H
 cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple
 helix, thereby inhibiting DNA replication and/or transcription. The
 oligoarabinonucleotides are used for antisense inhibition of gene
 expression or to prevent DNA replication, or reverse transcription of RNA
 by retroviruses. The compositions are therefore particularly used to
 inhibit retroviral replication. The oligoarabinonucleotides can also be
 used, in combination with RNase H, as reagents for sequence-specific
 cleavage or RNA mapping, and additionally for the study and control of
 gene expression in cells. The oligoarabinonucleotides have excellent
 affinity for RNA, increased resistance to nucleases and show little if
 any non-specific binding to cellular or serum proteins. They target ss
 RNA, but not complementary ss DNA, so may be useful for targeting
 retroviral genomic RNA to inhibit the early stages of viral replication.
 Oligoarabinonucleotides containing pyrimidine bases form triple helices
 with significantly higher thermal stability than those produced by normal
 oligonucleotides. Sequences AAZ87160-287164 represent
 oligoarabinonucleotides containing beta-D-arabinose used in an
 exemplification of the present invention
 Sequence 18 BP; 0 A; 0 C; 0 G; 0 T; 18 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1055

AAZ87166/c
 ID AAZ87166 standard; DNA; 18 BP.
 XX
 AC AAZ87166;
 XX
 DT 08-MAY-2000 (first entry)
 XX
 DE Deoxyarabinonucleotide SEQ ID NO:7.
 XX
 KW 2'-deoxy-2'-fluoro-beta-D-arabinose; antisense; inhibition;
 KW transcription; expression; reverse transcription; viral replication;
 KW RNase H cleavage; triple helix formation; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..18
 FT /*tag= a
 FT /note= "Deoxyribose moiety replaced by 2'-deoxy-2'-
 FT fluoro-beta-D-arabinose"
 XX
 PN WO9967378-A1.
 XX
 PD 29-DEC-1999.
 XX
 PF 17-JUN-1999; 99WO-CA000571.
 XX
 PR 19-JUN-1998; 98CA-02241361.
 XX
 PA (UYMC-) UNIV MCGILL.
 XX
 PI Damha MJ, Parniak MA, Noronha AM, Wilds C, Borkow G, Arion D;
 XX WPI; 2000-160584/14.
 DR
 XX
 PT Therapeutic composition containing antisense oligonucleotides that
 PT include arabinose sugars, particularly for inhibiting viral replication.
 XX
 PS Example 2; Page 31; 91pp; English.
 XX
 CC The invention relates to a new composition for selective, sequence-
 CC specific inhibition of gene transcription and expression in a host. The
 CC composition comprises oligonucleotides containing arabinose sugars that
 CC can hybridize to either a single-stranded (ss) RNA to induce RNase H
 CC cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple
 CC helix, thereby inhibiting DNA replication and/or transcription. The
 CC oligoarabinonucleotides are used for antisense inhibition of gene
 CC expression or to prevent DNA replication, or reverse transcription of RNA
 CC by retroviruses. The compositions are therefore particularly used to
 CC inhibit retroviral replication. The oligoarabinonucleotides can also be
 CC used, in combination with RNase H, as reagents for sequence-specific
 CC cleavage or RNA mapping, and additionally for the study and control of
 CC gene expression in cells. The oligoarabinonucleotides have excellent
 CC affinity for RNA, increased resistance to nucleases and show little if
 CC any non-specific binding to cellular or serum proteins. They target ss
 CC RNA, but not complementary ss DNA, so may be useful for targeting
 CC retroviral genomic RNA to inhibit the early stages of viral replication.
 CC Oligoarabinonucleotides containing pyrimidine bases form triple helices
 CC with significantly higher thermal stability than those produced by normal
 CC oligonucleotides. Sequences AAZ87165-287169 represent
 CC oligoarabinonucleotides containing 2'-deoxy-2'-fluoro-beta-D-
 CC arabinose used in an exemplification of the present invention
 XX
 SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1056	Db	1 AAAAAAAAAAAAAAAAAAAAAA 18
AAZ87167	RESULT 1057	
AAZ87167	AAZ03565/c	
AC	ID	AAZ03565 standard; DNA; 18 BP.
AC	AAZ87167;	
XX	XX	AAZ03565;
DT	08-MAY-2000	(first entry)
XX	XX	
XX	Deoxyarabinonucleotide SEQ ID NO:8.	
DE	XX	
XX	2'-deoxy-2'-fluoro-beta-D-arabinose; antisense; inhibition;	
KW	transcription; expression; reverse transcription; viral replication;	
KW	RNase H cleavage; triple helix formation; ss.	
XX	XX	
OS	Synthetic.	
PH	Key	Location/Qualifiers
FT	modified_base	1..18
FT	/tag=	a
FT	/note=	"Deoxyribose moiety replaced by 2'-deoxy-2'-fluoro-beta-D-arabinose"
FT	fluoro-beta-D-arabinose"	
XX	XX	
XX	WQ9967378-A1.	
PN	XX	
XX	29-DEC-1999.	
PD	XX	
XX	17-JUN-1999;	99WO-CA000571.
PF	XX	
XX	19-JUN-1998;	98CA-02241361.
PR	XX	
XX	(UYMC-) UNIV MCGILL.	
PA	XX	
XX	Damha MJ, Parniak MA, Noronha AM, Wilds C, Borkow G, Arion D;	
PI	XX	
XX	WPI; 2000-160584/14.	
DR	XX	
XX	Therapeutic composition containing antisense oligonucleotides that	
PT	include arabinose sugars, particularly for inhibiting viral replication.	
PT	XX	
XX	Example 2; Page 31; 91pp; English.	
PS	XX	
XX	The invention relates to a new composition for selective, sequence-	
CC	specific inhibition of gene transcription and expression in a host. The	
CC	composition comprises oligonucleotides containing arabinose sugars that	
CC	can hybridise to either a single-stranded (ss) RNA to induce RNase H	
CC	cleavage activity, or to a DNA/DNA or DNA/RNA duplex to form a triple	
CC	helix, thereby inhibiting DNA replication and/or transcription. The	
CC	oligoarabinonucleotides are used for antisense inhibition of gene	
CC	expression or to prevent DNA replication, or reverse transcription of RNA	
CC	by retroviruses. The compositions are therefore particularly used to	
CC	inhibit retroviral replication. The oligoarabinonucleotides can also be	
CC	used, in combination with RNase H, as reagents for sequence-specific	
CC	cleavage or RNA mapping, and additionally for the study and control of	
CC	gene expression in cells. The oligoarabinonucleotides have excellent	
CC	affinity for RNA, increased resistance to nucleases and show little if	
CC	any non-specific binding to cellular or serum proteins. They target ss	
CC	RNA, but not complementary ss DNA, so may be useful for targeting	
CC	retroviral genomic RNA to inhibit the early stages of viral replication.	
CC	Oligoarabinonucleotides containing pyrimidine bases form triple helices	
CC	with significantly higher thermal stability than those produced by normal	
CC	oligonucleotides. Sequences AAZ87165-287169 represent	
CC	oligodeoxyarabinonucleotides containing 2'-deoxy-2'-fluoro-beta-D-	
CC	arabinose used in an exemplification of the present invention	
XX	XX	
SQ	Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;	
	Query Match	0.7%; Score 18; DB 1; Length 18;
	Best Local Similarity	100.0%; Pred. No. 8.7e+02;
	Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
Qy	2709 AAAAAAAAAAAAAAAAAAAAAA 2726	
	Query Match	0.7%; Score 18; DB 1; Length 18;
	Best Local Similarity	100.0%; Pred. No. 8.7e+02;
	Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
	Query Match	0.7%; Score 18; DB 1; Length 18;
	Best Local Similarity	100.0%; Pred. No. 8.7e+02;

```

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1058
AAD17014
ID AAD17014 standard; DNA; 18 BP.
AC AAD17014;
XX
XX
DT 29-NOV-2001 (first entry)
XX
XX
DE Oligonucleotide A18-2PEG linker.
XX
XX
KW Scaffold protein; antibody mimic; fibronectin type III domain;
KW randomised loop; randomised beta-sheet; diagnostic purpose;
KW protein designing; ss.
XX
XX
OS Unidentified.
XX
XX
FH Key Location/Qualifiers
FT misc_feature 18
FT /tag= a
FT /note= "Linked to (PEG)2CCPuromycin"
XX
XX
PN WO200164942-A1.
XX
XX
PD 07-SEP-2001.
XX
XX
PF 28-FEB-2001; 2001WO-US006414.
XX
XX
PR 29-FEB-2000; 2000US-00515260.
XX
XX
PA (PHYL-) PHYLLOS INC.
XX
XX
PI Lipovsek D, Wagner RW, Kuimelis RG;
XX
XX
DR WPI; 2001-557782/62.
XX
XX
PT Fibronectin scaffold protein array for obtaining a protein/compound which
PT binds to a compound/protein, comprises a fibronectin type III domain
PT having a randomized loop, a randomized beta-sheet or their combination.
XX
XX
PS Disclosure; Page 25; 67pp; English.
XX
XX
CC The present invention relates to an array of proteins (antibody mimics)
CC comprising a fibronectin type III domain having a randomised loop, a
CC randomised beta-sheet, or their combination, and has the capacity to bind
CC to a compound that is not bound by a corresponding naturally- occurring
CC fibronectin, immobilised onto a solid support. The antibody mimics is
CC useful for detecting a compound preferably a protein, in a biological
CC sample. It is also useful to detect one or more different analytes
CC simultaneously in a sample. Hence is useful for diagnostic purposes. It
CC is also useful for the purpose of designing proteins capable of binding
CC to virtually any compound of interest. The present sequence is an
CC oligonucleotide A18-2PEG linker used in an exemplification of the
CC invention
XX
XX
SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1059
AAD17014
ID AAD17014 standard; DNA; 18 BP.
AC AAD17014;
XX
XX
DT 29-NOV-2001 (first entry)
XX
XX
DE Oligonucleotide A18-2PEG linker.
XX
XX
KW Scaffold protein; antibody mimic; fibronectin type III domain;
KW randomised loop; randomised beta-sheet; diagnostic purpose;
KW protein designing; ss.
XX
XX
OS Unidentified.
XX
XX
FH Key Location/Qualifiers
FT misc_feature 18
FT /tag= a
FT /note= "Linked to (PEG)2CCPuromycin"
XX
XX
PN WO200164942-A1.
XX
XX
PD 07-SEP-2001.
XX
XX
PF 28-FEB-2001; 2001WO-US006414.
XX
XX
PR 29-FEB-2000; 2000US-00515260.
XX
XX
PA (PHYL-) PHYLLOS INC.
XX
XX
PI Lipovsek D, Wagner RW, Kuimelis RG;
XX
XX
DR WPI; 2001-557782/62.
XX
XX
PT Fibronectin scaffold protein array for obtaining a protein/compound which
PT binds to a compound/protein, comprises a fibronectin type III domain
PT having a randomized loop, a randomized beta-sheet or their combination.
XX
XX
PS Disclosure; Page 25; 67pp; English.
XX
XX
CC The present invention relates to an array of proteins (antibody mimics)
CC comprising a fibronectin type III domain having a randomised loop, a
CC randomised beta-sheet, or their combination, and has the capacity to bind
CC to a compound that is not bound by a corresponding naturally- occurring
CC fibronectin, immobilised onto a solid support. The antibody mimics is
CC useful for detecting a compound preferably a protein, in a biological
CC sample. It is also useful to detect one or more different analytes
CC simultaneously in a sample. Hence is useful for diagnostic purposes. It
CC is also useful for the purpose of designing proteins capable of binding
CC to virtually any compound of interest. The present sequence is an
CC oligonucleotide A18-2PEG linker used in an exemplification of the
CC invention
XX
XX
SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1060
AAF99734/c
ID AAF99734 standard; DNA; 18 BP.
XX
AC AAF99734;
XX
XX
DT 12-JUN-2001 (first entry)
XX
XX
DE Immunostimulatory nucleic acid #850.

```

```

AAF99708/c
ID AAF99708 standard; DNA; 18 BP.
XX
AC AAF99708;
XX
XX
DT 12-JUN-2001 (first entry)
XX
XX
DE Immunostimulatory nucleic acid #824.
XX
XX
KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
XX
OS Synthetic.
XX
XX
PN WO200122972-A2.
XX
XX
PD 05-APR-2001.
XX
XX
PF 25-SEP-2000; 2000WO-US026383.
XX
XX
PR 25-SEP-1999; 99US-0156113P.
PR 27-SEP-1999; 99US-0156135P.
PR 23-AUG-2000; 2000US-0227436P.
XX
XX
PA (IOWA ) UNIV IOWA RES FOUND.
PA (COLE-) COLEY PHARM GMBH.
XX
XX
PI Krieg AM, Schetter C, Vollmer J;
XX
XX
DR WPI; 2001-273485/28.
XX
XX
PT Vaccinating against tumors, infectious diseases, allergies and asthma
PT using immunostimulatory Py-rich and TG nucleic acids.
XX
XX
PS Claim 101; Page 56; 338pp; English.
XX
XX
CC The present invention relates to a method for stimulating an immune
CC response. The method comprises administering an immunostimulatory nucleic
CC acid to a non-rodent subject in sufficient quantity to stimulate an
CC immune response. The present sequence is one such immunostimulatory
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
CC also useful for preventing cancer, asthma, infectious disease, allergy or
CC immune deficiency. The present sequence can also be used to redirect a
CC Th2 to a Th1 immune response and to activate immune cells. Note: the
CC present sequence may have a phosphorothioate backbone
XX
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1060
AAF99734/c
ID AAF99734 standard; DNA; 18 BP.
XX
AC AAF99734;
XX
XX
DT 12-JUN-2001 (first entry)
XX
XX
DE Immunostimulatory nucleic acid #850.

```

```

XX KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
XX KW immunostimulatory; tumour; viral infection; bacterial infection;
XX KW fungal infection; parasitic infection; cancer; asthma;
XX KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX OS Synthetic.
XX XX WO20012972-A2.
XX PD 05-APR-2001.
XX XX
XX XX 25-SEP-2000; 2000WO-US026383.
XX XX
XX PR 25-SEP-1999; 99US-0156113P.
XX PR 27-SEP-1999; 99US-0156135P.
XX PR 23-AUG-2000; 2000US-0227436P.
XX XX
XX PA (IOWA ) UNIV IOWA RES FOUND.
XX PA (COLE-) COLEY PHARM GMBH.
XX XX
XX PI Krieg AM, Schetter C, Vollmer J;
XX XX
XX DR WPI; 2001-273485/28.
XX XX
XX PT Vaccinating against tumors, infectious diseases, allergies and asthma
XX PT using immunostimulatory Py-rich and TG nucleic acids.
XX XX
XX PS Claim 101; Page 56; 338pp; English.
XX XX
XX CC The present invention relates to a method for stimulating an immune
XX CC response. The method comprises administering an immunostimulatory nucleic
XX CC acid to a non-rodent subject in sufficient quantity to stimulate an
XX CC immune response. The present sequence is one such immunostimulatory
XX CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
XX CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
XX CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
XX CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
XX CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
XX CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
XX CC also useful for preventing cancer, asthma, infectious disease, allergy or
XX CC immune deficiency. The present sequence can also be used to redirect a
XX CC Th2 to a Th1 immune response and to activate immune cells. Note: the
XX CC present sequence may have a phosphorothioate backbone
XX XX
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1061
AAF82472/C
ID AAF82472 standard; DNA; 18 BP.
XX XX
XX AC AAF82472;
XX XX
XX DT 29-JUN-2001 (first entry)
XX XX
XX DE Phagemid vector pCR2.1 polylinker oligonucleotide #6.
XX XX
XX KW Phagemid vector; pCR2.1; rat; secreted factor; P00210D09; cardiant;
XX KW nephrotropic; antiinflammatory; gene therapy; cardiac disease;
XX KW renal disease; inflammatory disease; polylinker; ss.
XX OS Synthetic.
XX XX WO200123419-A2.

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XX 05-APR-2001.
XX PD
XX PF 27-SEP-2000; 2000WO-US026582.
XX XX
XX PR 27-SEP-1999; 99US-0156277P.
XX XX
XX PA (SCIO-) SCIOS INC.
XX XX
XX PI Stanton LW, Kapoun AM;
XX XX
XX DR WPI; 2001-328177/34.
XX XX
XX PT Novel secreted factor encoded by clone P00210D09 useful for diagnosing,
XX PT treating and/or preventing various cardiac, renal and inflammatory
XX PT diseases.
XX XX
XX PS Example 1; Page 41; 69pp; English.
XX XX
XX CC The present sequence corresponds to polylinker DNA of the phagemid vector
XX CC pCR2.1. It was used in the construction of a normalised rat cDNA library,
XX CC which was used in an example demonstrating differential expression of a
XX CC rat gene referred to as clone P00210D09. The invention relates to a
XX CC polypeptide comprising a sequence of at least 80% identity to residues 22
XX CC -122 of the present sequence, or a sequence encoded by a nucleic acid
XX CC hybridising under stringent conditions to the complement of the coding
XX CC region comprising 1031 nucleotides, and having at least one biological
XX CC activity of the polypeptide encoded by clone P00210D09. The polypeptides
XX CC and polynucleotides of the invention are useful for the treatment of
XX CC cardiac, renal and inflammatory diseases. The polynucleotides are useful
XX CC in antisense mediated gene inhibition and in gene therapy. The
XX CC polypeptides are useful in assays for identifying lead compounds that may
XX CC be used as therapeutic agents in the treatment of cardiac, kidney or
XX CC inflammatory diseases
XX XX
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1062
AAS94743/C
ID AAS94743 standard; DNA; 18 BP.
XX XX
XX AC AAS94743;
XX XX
XX DT 12-MAR-2002 (first entry)
XX XX
XX DE Rat secreted factor DNA oligonucleotide probe #6.
XX XX
XX KW Rat; secreted factor polypeptide; cardiac disease; renal disease; kidney;
XX KW inflammatory disease; congestive heart failure; myocarditis; asthma; ss;
XX KW dilated congestive cardiomyopathy; angina pectoris; cardiac arrhythmia;
XX KW myocardial infarction; pulmonary hypertension; arteriosclerosis; stroke;
XX KW atherosclerosis; cardiac tumour; glomerulonephritis; nephrotic syndrome;
XX KW renal infarction; hereditary nephritis; polycystic kidney disease;
XX KW chronic renal failure; renal vein thrombosis; medullary sponge kidney;
XX KW rheumatoid arthritis; osteoarthritis; psoriasis; restenosis; PCR primer;
XX KW graft versus host reaction; Crohn's disease; ulcerative colitis; probe;
XX KW Alzheimer's disease; gene therapy.
XX XX
XX OS Synthetic.
XX XX WO200174901-A2.
XX PD 11-OCT-2001.
XX XX

```



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PF 23-MAR-2001; 2001WO-US009555.
XX
PR 31-MAR-2000; 2000US-0193548P.
PR 14-MAR-2001; 2001US-00809545.
XX
XX (SCIO-) SCIOS INC.
XX
XX Stanton LW, White RT;
XX
DR WPI; 2002-010779/01.
XX
XX Novel secreted factor polypeptide useful for treating cardiac diseases
XX such as arteriosclerosis, myocardial infarction, inflammatory diseases
XX such as asthma, stroke, and rheumatoid arthritis and renal diseases.
XX
XX Example 1; Page 51; 189pp; English.
XX
XX The invention relates to rat secreted factor polypeptides and the
XX polynucleotides encoding them. The sequences are useful for treating
XX cardiac, renal or inflammatory diseases. These include cardiac diseases
XX such as congestive heart failure, myocarditis, dilated congestive
XX cardiomyopathy, angina pectoris, myocardial infarction, cardiac
XX arrhythmia, pulmonary hypertension, arteriosclerosis, atherosclerosis and
XX cardiac tumours, renal diseases such as glomerulonephritis, nephrotic
XX syndrome, renal infarction, hereditary nephritis, polycystic kidney
XX disease, chronic renal failure, renal vein thrombosis and medullary
XX sponge kidney and inflammatory diseases such as asthma, rheumatoid
XX arthritis, osteoarthritis, stroke, psoriasis, restenosis, graft versus
XX host reaction, Crohn's disease, ulcerative colitis and Alzheimer's
XX disease. Sequences AAS94693-AAS94745 represent cDNA clones, which encode
XX the secreted factor polypeptides of the invention, and oligonucleotide
XX probes and PCR primers
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1063
ABS78455/c
ID ABS78455 standard; DNA; 18 BP.
XX
XX ABS78455;
XX
XX 13-DEC-2002 (first entry)
XX
XX Angiogenesis inhibitory oligonucleotide #939.
XX
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
XX diabetic retinopathy; retinopathy of prematurity; macular degeneration;
XX corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
XX rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
XX plaque neovascularisation; telangiectasia; haemophilic joint;
XX angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
XX scleroderma; hypertrophic scar.
XX
XX Synthetic.
XX
XX WO200253141-A2.
XX
XX 11-JUL-2002.
XX
XX 14-DEC-2001; 2001WO-US048458.
XX
XX 14-DEC-2000; 2000US-0255534P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX
XX Bratzler RL;
XX
XX WPI; 2002-566690/60.
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
XX antiangiogenic nucleic acid molecule to the subject.
XX
XX Claim 2; Page 36; 276pp; English.
XX
XX The invention relates to inhibiting angiogenesis in a subject, comprising
XX administering at least one antiangiogenic nucleic acid molecule. Also
XX included is a kit comprising a first container housing the antiangiogenic
XX nucleic acids, and instructions for administering them to a subject
XX having a condition characterised by unwanted angiogenesis. The method is
XX useful for inhibiting angiogenesis associated with solid tumour growth,
XX tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
XX diabetic retinopathy, retinopathy of prematurity, macular degeneration,
XX corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
XX rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
XX neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
XX wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
XX acid of the invention
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1064
ABS78429/c
ID ABS78429 standard; DNA; 18 BP.
XX
XX ABS78429;
XX
XX 13-DEC-2002 (first entry)
XX
XX Angiogenesis inhibitory oligonucleotide #913.
XX
XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
XX tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
XX diabetic retinopathy; retinopathy of prematurity; macular degeneration;
XX corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
XX rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
XX plaque neovascularisation; telangiectasia; haemophilic joint;
XX angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
XX scleroderma; hypertrophic scar.
XX
XX Synthetic.
XX
XX WO200253141-A2.
XX
XX 11-JUL-2002.
XX
XX 14-DEC-2001; 2001WO-US048458.
XX
XX 14-DEC-2000; 2000US-0255534P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX
XX Bratzler RL;
XX
XX WPI; 2002-566690/60.
XX
XX Inhibiting angiogenesis in a subject, involves administering at least one
XX

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PT antiangiogenic nucleic acid molecule to the subject.
 XX
 PS Claim 2; Page 35; 276pp; English.
 XX
 CC The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubeosis, Osler-Weber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention
 XX
 SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1065
 ABL39401/c
 ID ABL39401 standard; DNA; 18 BP.
 AC
 XX ABL39401;
 XX
 DT 16-APR-2002 (first entry)
 XX
 DE Immunostimulatory nucleic acid SEQ ID NO: 837.
 XX
 KW Antibody-induced cell lysis; cancer; immunostimulatory; CD20;
 KW angiogenesis; metastasis; cytostatic; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..18
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "phosphorothioate backbone"
 XX
 XX WO200197843-A2.
 XX
 XX 27-DEC-2001.
 XX
 XX 22-JUN-2001; 2001WO-US020154.
 XX
 XX 22-JUN-2000; 2000US-0213346P.
 XX
 XX (IOWA) UNIV IOWA RES FOUND.
 XX
 XX Weiner G, Hartmann G;
 XX
 XX WPI; 2002-154611/20.
 XX
 XX Treating or preventing cancer, such as basal cell carcinoma, comprises
 XX administering immunostimulatory nucleic acids that induce expression of
 XX cell surface antigens and antibodies to a subject having or at risk of
 XX developing cancer.
 XX
 XX Disclosure; Page 308; 312pp; English.
 PS
 XX The present invention relates to methods for treating or preventing

CC cancer, involving administering to a subject having or at risk of
 CC developing cancer immunostimulatory nucleic acids that induce expression
 CC of cell surface antigens and antibodies. The methods are useful for
 CC treating or preventing cancer such as basal cell carcinoma, bladder
 CC cancer, bone cancer, brain and central nervous system (CNS) cancer,
 CC breast cancer, cervical cancer, colon and rectum cancer, connective
 CC tissue cancer, oesophageal cancer, eye cancer, kidney cancer, larynx
 CC cancer, leukaemia, liver cancer, lung cancer, Hodgkin's lymphoma, non-
 CC Hodgkin's lymphoma, melanoma, myeloma, oral cavity cancer, ovarian
 CC cancer, pancreatic cancer, prostate cancer, rhabdomyosarcoma, skin
 CC cancer, stomach cancer, testicular cancer, and uterine cancer. The
 CC present sequence is an immunostimulatory oligonucleotide described in the
 CC exemplification of the invention
 XX
 SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1066
 AAD41497/c
 ID AAD41497 standard; DNA; 18 BP.
 XX
 AC AAD41497;
 XX
 XX 30-OCT-2002 (first entry)
 DT
 XX
 DE Oligonucleotide used for amplifying sea hare cytoplasm L DNA.
 XX
 KW Apoptosis; ion channel modulator; hyperproliferative disease; tumour;
 KW therapy; leukaemia; carcinoma; sarcoma; degenerative disease; melanoma;
 KW Alzheimer's disease; Parkinson's disease; arteriosclerosis;
 KW heart disease; stroke; vascular disease; neurotic; neuroprotective;
 KW cerebroprotective; cardiac; cytotoxic protein; cytoplasm L; ss.
 XX
 OS Unidentified.
 XX
 XX WO200231144-A2.
 XX
 XX 18-APR-2002.
 XX
 XX 12-OCT-2001; 2001WO-EP011837.
 XX
 XX 13-OCT-2000; 2000EP-00122466.
 XX
 XX (PLAC) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
 XX
 XX Butzke D, Machuy N, Rudel T, Meyer TF;
 XX
 XX WPI; 2002-537205/57.
 XX
 XX Novel polypeptide having cytotoxic activity obtainable from Aplysia,
 XX useful for destroying tumors, for identifying novel targets for the
 XX development of anti-tumor agents, and as specific ion channel modulators.
 XX
 XX Example 5; Page 37; 87pp; English.
 XX
 XX The present invention relates to novel polypeptides having cytotoxic
 XX activity obtainable from sea hare Aplysia. Sequences of the invention are
 XX useful for the manufacture of cytotoxic agents against apoptosis-
 XX resistant cells, where the agents are useful for diagnosis, prevention,
 XX treatment of disorders associated with dysfunctions of GAP-SH3 binding
 XX protein, factors for generating or detoxifying reactive oxygen species
 XX (ROS) and factors for blocking and/or by-passing of caspases. They are
 XX useful for tumour therapy. Cytotoxic proteins of the invention are useful
 XX for destroying tumors and/or selectively killing cells in tissues, for
 XX identifying novel targets for the development of pharmaceutical agents,

CC preferably anti-tumour agents and as specific ion channel modulators,
 CC e.g., blockers or openers for therapy, diagnostic or research. They are
 CC useful for the diagnosis and therapy of hyperproliferative diseases,
 CC preferably tumours, e.g., leukaemia, carcinoma, sarcoma and melanoma.
 CC They are also useful for development of drugs for the treatment of
 CC degenerative diseases such as Alzheimer's disease, Parkinson's disease,
 CC arteriosclerosis, heart diseases, stroke and vascular diseases. The
 CC present sequence is an oligonucleotide which is used for amplifying sea
 CC hare cytoplasmic L DNA. This sequence is used in the exemplification of the
 CC invention

XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 8.7e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726

Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1067

ABS53437/C

ID ABS53437 standard; DNA; 18 BP.

XX AC ABS53437;

XX DT 29-NOV-2002 (first entry)

XX DE Poly d(T) primer.

XX KW Terminal continuation; TC; ss; second strand cDNA synthesis; primer;

XX KW poly d(T).

XX OS Synthetic.

XX PN WO200265093-A2.

XX PD 22-AUG-2002.

XX PF 14-FEB-2002; 2002WO-US005713.

XX PR 14-FEB-2001; 2001US-0268645P.

XX PR 14-FEB-2001; 2001US-0268664P.

XX PR 18-JUL-2001; 2001US-0306216P.

XX PR 07-NOV-2001; 2001US-0344557P.

XX PR 07-NOV-2001; 2001US-0348242P.

XX PR 09-NOV-2001; 2001US-0350176P.

XX PA (BAYU) BAYLOR COLLEGE MEDICINE.

XX PA (REME-) RES FOUND MENTAL HYGIENE INC.

XX PI Ginsberg SD, Che S;

XX DR WPI; 2002-567050/60.

XX PT Increasing efficiency of second strand cDNA synthesis using terminal
 PT continuation model before performing further RNA amplification by RNA
 PT transcription.

XX PS Example 7; Page 80; 128pp; English.

XX CC This invention relates to a novel method for increasing the efficiency of
 CC second strand cDNA synthesis through a mechanism of terminal
 CC continuation. In the method an RNA molecule is obtained and a first
 CC primer is added that comprises a region that hybridises to a
 CC complementary region of the molecule before a second primer is added
 CC comprising at least one riboguanine at the 3' end of the primer. A first
 CC complementary nucleic acid molecule is synthesised, the RNA molecule and
 CC second primer are removed and a second complementary nucleic acid
 CC molecule is synthesised to form a second hybrid with an extension product
 CC of the third primer bound to the first complementary molecule. The method

CC of the invention is useful for increasing the efficiency of second strand
 CC cDNA synthesis and may be used for linear amplification of genetic
 CC signals from histologically stained tissue. The present sequence
 CC represents a poly d(T) PCR primer used in the method of the invention
 XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 8.7e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726

Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1068

ABA93239/C

ID ABA93239 standard; DNA; 18 BP.

XX AC ABA93239;

XX DT 18-APR-2002 (first entry)

XX DE Adaptor oligonucleotide SEQ ID NO:2.

XX KW Detection; comparative detection; adaptor; ss.

XX OS Synthetic.

XX PN JP2001333800-A.

XX PD 04-DEC-2001.

XX PF 30-MAY-2000; 2000JP-00160324.

XX PR 30-MAY-2000; 2000JP-00160324.

XX PA (UNIT-) UNITECH CO LTD.

XX DR WPI; 2002-135950/18.

XX PT Comparative detection of the amounts of RNA and DNA.

XX PS Disclosure; Page 9; 9pp; Japanese.

XX CC The present invention describes a method for the comparative detection of
 CC the amount of an RNA. The method comprises: (a) cDNAs obtained by
 CC transcribing respectively from at least two tissue RNAs are respectively
 CC fragmented by using a same restriction enzyme; (b) each different adaptor
 CC and a common adaptor are added to each of the cDNA fragments derived from
 CC the same or different tissues by the step (a); (c) the resultant adaptor-
 CC added cDNAs are mixed together; (d) an adaptor primer having the common
 CC sequence to said different adaptor and a gene-specific adaptor are used
 CC to amplify said adaptor-added cDNAs containing no region derived from
 CC polyadenylic acid of the mRNA before the addition of the adaptor among
 CC the adaptor-added cDNAs prepared by the step (b); (e) the ratios of the
 CC cDNA amounts are measured between the tissues; (f) the RNA is detected
 CC from the measured result; (g) each different adaptor and a common adaptor
 CC are added to each of the genomic DNA fragments derived from a same or
 CC different individuals; (h) the resultant adaptor-added genomic DNAs are
 CC mixed together; (i) the adaptor-added genomic DNAs are amplified by using
 CC an adaptor primer having the common sequence to the different adaptor and
 CC a sequence-specific adaptor; and (j) the ratios of the amplified amounts
 CC of the genomic DNAs are measured between the individuals. The method is
 CC used for the detection of the amounts of RNA and DNA. The present
 CC sequence represents an oligonucleotide which is used in the
 CC exemplification of the present invention

XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 8.7e+02;

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Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1069
AAD56466
ID AAD56466 standard; RNA; 18 BP.
XX AC AAD56466;
XX DT 07-AUG-2003 (first entry)
XX DE Target RNA #1 used in the exemplification of the invention.
XX KW Acyclic linker; gene expression; gene therapy; ss.
XX OS Unidentified.
XX PN WO2003037909-A1.
XX PD 08-MAY-2003.
XX PF 29-OCT-2002; 2002WO-CA001628.
XX PR 29-OCT-2001; 2001US-0330719P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Viarovkina E, Mangos MM, Parniak MA, Min K;
XX DR WPI; 2003-421516/39.
XX PT Novel acyclic linker-containing oligonucleotide useful for preventing or
decreasing translation, reverse transcription and/or replication of a
target RNA in a system, comprises a modified deoxyribonucleotide.
XX PS Example 2; Fig 5; 104pp; English.
XX CC The invention relates to an acyclic linker-containing oligonucleotide
comprising at least one modified deoxyribonucleotide. Oligonucleotides of
the invention are useful for preventing or decreasing translation,
reverse transcription and/or replication of a target RNA in a system.
They are useful for selectively preventing gene expression in a sequence-
specific manner, for hybridising to complementary RNA such as cellular
mRNA or viral RNA, to hybridise to and induce cleavage of complementary
RNA. They are also useful therapeutically in formulations or medicaments
to prevent or treat a disease characterised by the expression of a
particular target RNA. The invention is used in gene therapy. The present
sequence is a target RNA, used in the exemplification of the invention

SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. NO. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1070
AAD56440/C
ID AAD56440 standard; DNA; 18 BP.
XX AC AAD56440;
XX DT 07-AUG-2003 (first entry)
XX DE Antisense oligo #1, to elicit RNase H degradation of target RNA.

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XX KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
XX OS antisense; ss.
XX OS Unidentified.
XX PN WO2003037909-A1.
XX PD 08-MAY-2003.
XX PF 29-OCT-2002; 2002WO-CA001628.
XX PR 29-OCT-2001; 2001US-0330719P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Viarovkina E, Mangos MM, Parniak MA, Min K;
XX DR WPI; 2003-421516/39.
XX PT Novel acyclic linker-containing oligonucleotide useful for preventing or
decreasing translation, reverse transcription and/or replication of a
target RNA in a system, comprises a modified deoxyribonucleotide.
XX PS Example 2; Fig 9; 104pp; English.
XX CC The invention relates to an acyclic linker-containing oligonucleotide
comprising at least one modified deoxyribonucleotide. Oligonucleotides of
the invention are useful for preventing or decreasing translation,
reverse transcription and/or replication of a target RNA in a system.
They are useful for selectively preventing gene expression in a sequence-
specific manner, for hybridising to complementary RNA such as cellular
mRNA or viral RNA, to hybridise to and induce cleavage of complementary
RNA. They are also useful therapeutically in formulations or medicaments
to prevent or treat a disease characterised by the expression of a
particular target RNA. The invention is used in gene therapy. The present
sequence is an antisense oligo used to elicit human RNase (ribonuclease)
H degradation of target RNA. This sequence is used in the exemplification
of the invention

SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. NO. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1071
AAD56446/C
ID AAD56446 standard; DNA; 18 BP.
XX AC AAD56446;
XX DT 07-AUG-2003 (first entry)
XX DE 2'-F-ANA antisense oligo #1, to elicit RNase H degradation of target RNA.
XX KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
XX OS antisense; ss.
XX OS Unidentified.
XX FH Key Location/Qualifiers
FT modified_base 1..18
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-deoxy-2'-fluoroarabinothymidine"
XX PN WO2003037909-A1.

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XX PD 08-MAY-2003.
XX PF 29-OCT-2002; 2002WO-CA001628.
XX PR 29-OCT-2001; 2001US-0330719P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Viazovkina E, Mangos MW, Parniak MA, Min K;
XX WI WPI; 2003-421516/39.
XX PT Novel acyclic linker-containing oligonucleotide useful for preventing or
XX PT decreasing translation, reverse transcription and/or replication of a
XX PT target RNA in a system, comprises a modified deoxyribonucleotide.
XX PS Example 2; Fig 7; 104pp; English.
XX CC The invention relates to an acyclic linker-containing oligonucleotide
XX CC comprising at least one modified deoxyribonucleotide. Oligonucleotides of
XX CC the invention are useful for preventing or decreasing translation,
XX CC reverse transcription and/or replication of a target RNA in a system.
XX CC They are useful for selectively preventing gene expression in a sequence-
XX CC specific manner, for hybridising to complementary RNA such as cellular
XX CC mRNA or viral RNA, to hybridise to and induce cleavage of complementary
XX CC RNA. They are also useful therapeutically in formulations or medicaments
XX CC to prevent or treat a disease characterised by the expression of a
XX CC particular target RNA. The invention is used in gene therapy. The present
XX CC sequence is an antisense oligo used to elicit human RNase (ribonuclease)
XX CC H degradation of target RNA. This sequence is used in the exemplification
XX CC of the invention
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1072
ACH03247/c
ID ACH03247 standard; DNA; 18 BP.
XX AC ACH03247;
XX DT 25-SEP-2003 (first entry)
XX DE Immunostimulatory nucleic acid #882.
XX KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
XX KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
XX KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
XX KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX OS Synthetic.
XX PN US2003050268-A1.
XX PD 13-MAR-2003.
XX PF 29-MAR-2002; 2002US-00112653.
XX PR 29-MAR-2001; 2001US-0279642P.
XX PA (KRIE/) KRIEG A M.
XX PA (BERG/) BERG D J.
XX PI Krieg AM, Berg DJ;

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XX DR WPI; 2003-521815/49.
XX PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
XX PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
XX PT disease by administering an immunostimulatory nucleic acid.
XX PS Disclosure; Page 33; 229pp; English.
XX CC The invention describes a method of treating non-allergic inflammatory
XX CC disease comprising administering to a subject having or at risk of
XX CC developing a non-allergic inflammatory disease an immunostimulatory
XX CC nucleic acid for prevention or treatment of the disease. The method is
XX CC useful for treating non-allergic inflammatory diseases, such as
XX CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
XX CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
XX CC This sequence represents an immunostimulatory nucleic acid
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1073
AAD57871/c
ID AAD57871 standard; DNA; 18 BP.
XX AC AAD57871;
XX DT 20-NOV-2003 (first entry)
XX DE Antisense oligo #1 used in the exemplification of the invention.
XX KW Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
XX KW hepatitis B; gene therapy; virucide; anti-HIV; antisense; ss.
XX OS Unidentified.
XX PN WO2003064441-A2.
XX PD 07-AUG-2003.
XX PF 31-JAN-2003; 2003WO-CA000129.
XX PR 01-FEB-2002; 2002US-0352873P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Parniak MA;
XX WI WPI; 2003-689523/65.
XX PT New oligonucleotide, useful for preventing or treating a disease related
XX PT to a target RNA in a system, e.g., AIDS or hepatitis B.
XX PS Example 2; Page 35; 73pp; English.
XX CC The present invention relates to a new oligonucleoside which comprises
XX CC alternating first and second segments. The first segment comprises at
XX CC least one sugar modified nucleoside. The second segment comprises at
XX CC least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of
XX CC each of the first and second segments, so that it comprises at least 4
XX CC alternating segments. The oligonucleotide is useful for preparing a
XX CC composition for inducing RNase H-mediated cleavage of a target RNA in a
XX CC system, preventing or decreasing translation, transcription or
XX CC replication of a target RNA in a system, detecting the presence of a
XX CC target RNA in a system, validating a gene target corresponding to a

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CC target RNA in a system or preventing or treating a disease related to a
CC target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS)
CC or hepatitis B. The invention is useful in gene therapy. The present
CC sequence is an antisense oligonucleotide used in the exemplification of
CC the invention
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1074
AAD57878/c
ID AAD57878 standard; DNA; 18 BP.
XX
AC AAD57878;
XX
DT 20-NOV-2003 (first entry)
XX
DE Antisense DNA-RNA hybrid #2 used in the exemplification of the invention.
XX
KW Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
KW hepatitis B; gene therapy; virucide; anti-HIV; antisense; DNA-RNA hybrid;
KW ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT misc_RNA 1..3
FT /*tag= a
FT /label= RNA
FT /note= "2'-O-methyl-D-uridine"
FT misc_RNA 7..9
FT /*tag= b
FT /label= RNA
FT /note= "2'-O-methyl-D-uridine"
FT misc_RNA 13..15
FT /*tag= c
FT /label= RNA
FT /note= "2'-O-methyl-D-uridine"
XX
PN WO2003064441-A2.
XX
XX 07-AUG-2003.
XX
XX 31-JAN-2003; 2003WO-CA000129.
XX
XX 01-FEB-2002; 2002US-0352873P.
XX
XX (UYMC-) UNIV MCGILL.
XX
XX Damha MJ, Parniak MA;
XX
XX WPI; 2003-689523/65.
XX
XX New oligonucleotide, useful for preventing or treating a disease related
XX to a target RNA in a system, e.g., AIDS or hepatitis B.
XX
XX Example 2; Page 35; 73pp; English.
XX
XX The present invention relates to a new oligonucleoside which comprises
XX alternating first and second segments. The first segment comprises at
XX least one sugar modified nucleoside. The second segment comprises at
XX least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of
XX each of the first and second segments, so that it comprises at least 4
XX alternating segments. The oligonucleotide is useful for preparing a
XX composition for inducing RNase H-mediated cleavage of a target RNA in a

CC system, preventing or decreasing translation, transcription or
CC replication of a target RNA in a system, detecting the presence of a
CC target RNA in a system, validating a gene target corresponding to a
CC target RNA in a system or preventing or treating a disease related to a
CC target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS)
CC or hepatitis B. The invention is useful in gene therapy. The present
CC sequence is an antisense DNA-RNA hybrid used in the exemplification of
CC the invention
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 9 T; 9 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1075
AAD57879/c
ID AAD57879 standard; DNA; 18 BP.
XX
AC AAD57879;
XX
DT 20-NOV-2003 (first entry)
XX
DE Antisense DNA-RNA hybrid #3 used in the exemplification of the invention.
XX
KW Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
KW hepatitis B; gene therapy; virucide; anti-HIV; antisense; DNA-RNA hybrid;
KW ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT misc_RNA 1..6
FT /*tag= a
FT /label= RNA
FT /note= "2'-O-methyl-D-uridine"
FT misc_RNA 13..18
FT /*tag= b
FT /label= RNA
FT /note= "2'-O-methyl-D-uridine"
XX
PN WO2003064441-A2.
XX
XX 07-AUG-2003.
XX
XX 31-JAN-2003; 2003WO-CA000129.
XX
XX 01-FEB-2002; 2002US-0352873P.
XX
XX (UYMC-) UNIV MCGILL.
XX
XX Damha MJ, Parniak MA;
XX
XX WPI; 2003-689523/65.
XX
XX New oligonucleotide, useful for preventing or treating a disease related
XX to a target RNA in a system, e.g., AIDS or hepatitis B.
XX
XX Example 2; Page 35; 73pp; English.
XX
XX The present invention relates to a new oligonucleoside which comprises
XX alternating first and second segments. The first segment comprises at
XX least one sugar modified nucleoside. The second segment comprises at
XX least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of
XX each of the first and second segments, so that it comprises at least 4
XX alternating segments. The oligonucleotide is useful for preparing a
XX composition for inducing RNase H-mediated cleavage of a target RNA in a
XX system, preventing or decreasing translation, transcription or

CC replication of a target RNA in a system, detecting the presence of a
 CC target RNA in a system, validating a gene target corresponding to a
 CC target RNA in a system or preventing or treating a disease related to a
 CC target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS)
 CC or hepatitis B. The invention is useful in gene therapy. The present
 CC sequence is an antisense DNA-RNA hybrid used in the exemplification of
 CC the invention
 XX
 SQ Sequence 18 BP; 0 A; 0 C; 0 G; 6 T; 12 U; 0 Other;
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1076
 AAD57877/C
 ID AAD57877 standard; DNA; 18 BP.
 XX
 AC AAD57877;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Antisense DNA-RNA hybrid #1 used in the exemplification of the invention.
 XX
 DE Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
 KW hepatitis B; gene therapy; virucide; anti-HIV; antisense; DNA-RNA hybrid;
 KW ss.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT misc_RNA 1
 FT /tag= a
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 3
 FT /tag= b
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 5
 FT /tag= c
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 7
 FT /tag= d
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 9
 FT /tag= e
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 11
 FT /tag= f
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 13
 FT /tag= g
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 15
 FT /tag= h
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"
 FT misc_RNA 17
 FT /tag= i
 FT /label= RNA
 FT /note= "2'-O-methyl-D-uridine"

PN WO2003064441-A2.
 XX
 PD 07-AUG-2003.
 XX
 PF 31-JAN-2003; 2003WO-CA000129.
 XX
 PR 01-FEB-2002; 2002US-0352873P.
 XX
 PA (UYMC-) UNIV MCGILL.
 XX
 PI Damha MJ, Parniak MA;
 XX
 DR WPI; 2003-689523/65.
 XX
 FT New oligonucleotide, useful for preventing or treating a disease related
 FT to a target RNA in a system, e.g., AIDS or hepatitis B.
 XX
 PS Example 2; Page 35; 73pp; English.
 XX
 CC The present invention relates to a new oligonucleoside which comprises
 CC alternating first and second segments. The first segment comprises at
 CC least one sugar modified nucleoside. The second segment comprises at
 CC least one 2'-deoxynucleoside. The oligonucleoside comprises at least 2 of
 CC each of the first and second segments, so that it comprises at least 4
 CC alternating segments. The oligonucleotide is useful for preparing a
 CC composition for inducing RNase H-mediated cleavage of a target RNA in a
 CC system, preventing or decreasing translation, transcription or
 CC replication of a target RNA in a system, detecting the presence of a
 CC target RNA in a system, validating a gene target corresponding to a
 CC target RNA in a system or preventing or treating a disease related to a
 CC target RNA in a system, e.g., acquired immune deficiency syndrome (AIDS)
 CC or hepatitis B. The invention is useful in gene therapy. The present
 CC sequence is an antisense DNA-RNA hybrid used in the exemplification of
 CC the invention
 XX
 SQ Sequence 18 BP; 0 A; 0 C; 0 G; 9 T; 9 U; 0 Other;
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1077
 AAD57890
 ID AAD57890 standard; RNA; 18 BP.
 XX
 AC AAD57890;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Target RNA #1 used in RNase H assay.
 XX
 DE Sugar-modified nucleoside; acquired immune deficiency syndrome; AIDS;
 KW hepatitis B; gene therapy; virucide; anti-HIV; ss.
 XX
 OS Unidentified.
 XX
 PN WO2003064441-A2.
 XX
 PD 07-AUG-2003.
 XX
 PF 31-JAN-2003; 2003WO-CA000129.
 XX
 PR 01-FEB-2002; 2002US-0352873P.
 XX
 PA (UYMC-) UNIV MCGILL.
 XX
 PI Damha MJ, Parniak MA;
 XX


```

AC ADE77617;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human probe NEG for elongation mediated multiplexed analysis of HLA-DR.
XX
KW probe; ss; negative control; CFTR; human leukocyte antigen; HLA;
XX genetic testing; carrier screening; genotyping; profiling; polymorphic;
KW multiplexed elongation assay; enzymatic recognition;
KW cystic fibrosis conductance transmembrane regulator.
XX
OS Synthetic.
OS Homo sapiens.
XX
FN WO2003034029-A2.
XX
PD 24-APR-2003.
XX
PF 15-OCT-2002; 2002WO-US033012.
XX
PR 15-OCT-2001; 2001US-0329427P.
PR 15-OCT-2001; 2001US-0329428P.
PR 15-OCT-2001; 2001US-0329619P.
PR 15-OCT-2001; 2001US-0329620P.
PR 14-MAR-2002; 2002US-0364416P.
XX
PA (BIOA-) BIOARRAY SOLUTIONS LTD.
XX
XX Li AX, Hashmi G, Seul M;
XX
XX WPT; 2003-393553/37.
XX
XX Concurrent interrogation of a number of polymorphic sites, useful for
XX genetic testing, carrier screening, genetic profiling, and identity
XX testing, comprises conducting a multiplexed elongation assay using
XX probes.
XX
XX Example 9; Page 46; 143pp; English.
XX
XX This invention relates to a novel method for the concurrent interrogation
XX of a number of polymorphic sites in the presence of, and without
XX interference from, non-designated polymorphic sites. Specifically, it
XX comprises conducting a multiplexed elongation assay by applying one or
XX more temperature cycles to achieve linear amplification of the target or
XX a combination of annealing and elongation steps under temperature-
XX controlled conditions. Furthermore, this detection method uses probe
XX extension or elongation and relies on enzymatic recognition, a superior
XX technique that no longer depends on differential hybridisation. The
XX present invention describes probes and methods useful for identifying or
XX detecting polymorphisms at one or more designated sites, such that they
XX can identify mutations within the cystic fibrosis conductance
XX transmembrane regulator (CFTR) or the human leukocyte antigen (HLA)
XX genes. In addition, concurrent interrogation of a multiplicity of
XX polymorphic sites is useful for genetic testing, carrier screening,
XX genotyping or genetic profiling, and identity testing. This
XX oligonucleotide is the negative control probe used for the elongation
XX mediated multiplexed analysis of HLA-DR, in an exemplification of the
XX invention.
XX
XX Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 8.7e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAA 2726
XX |
XX Db 1 AAAAAAAAAAAAAAAAAA 18
XX
XX RESULT 1081
XX ADZ47933/c
XX ID ADI34489 standard; DNA; 18 BP.
XX
XX AC ADI34489;
XX
XX DT 22-APR-2004 (first entry)
XX
XX DE Nucleotide sequence of an oligo dT18.
XX
XX KW Nucleic acid amplification; RNA transcription; RNA polymerase; ss.
XX
XX OS Synthetic.
XX
XX FN WO2003102243-A1.
XX
XX PD 11-DEC-2003.
XX
XX PF 30-MAY-2003; 2003WO-US017103.
XX
XX PR 31-MAY-2002; 2002US-0384454P.
XX
XX PA (JANC) JANSSEN PHARM NV.
XX
XX Kamme FC, Zhu JY;
XX

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XX
XX ADZ47933;
XX
DT 16-JUN-2005 (first entry)
XX
DE Primer #10.
XX
KW DNA detection; RNA detection; primer; ss.
XX
OS Synthetic.
XX
PN JP2003116597-A.
XX
PD 22-APR-2003.
XX
PF 05-OCT-2001; 2001JP-00309382.
XX
PR 05-OCT-2001; 2001JP-00309382.
XX
PA (HITA) HITACHI LTD.
XX
XX WPI; 2003-601826/57.
XX
XX Detecting nucleic acid, by hybridizing nucleic acid with other nucleic
XX acid target obtained from reverse transcription or RNA amplification, and
XX other single stranded nucleic acid probe immobilized on a support body.
XX
XX Example 2; Page 6; 10pp; Japanese.
XX
XX The present invention relates to a method for detecting nucleic acid
XX (NA). The method involves hybridizing the NA with nucleic acid target
XX sequence obtained from reverse transcription or RNA amplification using
XX the sample RNA as a template and single stranded probes immobilized on a
XX support body. The present sequence was used to illustrate the method of
XX the invention.
XX
XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 8.7e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Qy 2709 AAAAAAAAAAAAAAAAAA 2726
XX |
XX Db 18 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1082
XX ADI34489/c
XX ID ADI34489 standard; DNA; 18 BP.
XX
XX AC ADI34489;
XX
XX DT 22-APR-2004 (first entry)
XX
XX DE Nucleotide sequence of an oligo dT18.
XX
XX KW Nucleic acid amplification; RNA transcription; RNA polymerase; ss.
XX
XX OS Synthetic.
XX
XX FN WO2003102243-A1.
XX
XX PD 11-DEC-2003.
XX
XX PF 30-MAY-2003; 2003WO-US017103.
XX
XX PR 31-MAY-2002; 2002US-0384454P.
XX
XX PA (JANC) JANSSEN PHARM NV.
XX
XX Kamme FC, Zhu JY;
XX

```

DR WPI; 2004-035466/03.
 XX Amplifying for RNA in a sample, useful for improving RNA polymerase based
 PT RNA transcription from a polynucleotide template, comprises eliminating
 PT single-stranded oligonucleotide from the transcription sample.
 XX
 XX Example 1; SEQ ID NO 8; 26pp; English.
 XX
 XX The invention relates to amplifying for RNA in a sample comprises
 CC eliminating single-stranded oligonucleotide from the transcription
 CC sample. The method involves synthesizing single-stranded cDNA by
 CC incubating the sample RNA with reverse transcriptase and an
 CC oligonucleotide primer that primes synthesis in a direction toward 5' end
 CC of the RNA; converting the single-stranded cDNA into double-stranded cDNA
 CC to form a transcription sample containing a cDNA template; eliminating
 CC single-stranded oligonucleotide from the transcription sample; and
 CC transcribing the cDNA template into RNA using an RNA polymerase. The
 CC method is useful for improving RNA polymerase based RNA transcription
 CC from a polynucleotide template. The method inhibits the undesired non-
 CC template derived production of RNA in the transcription reaction.
 CC Sequences ADI34483-ADI34489 represent oligonucleotides used in a T7 RNA
 CC transcription reaction.
 XX
 XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1083
 ADH78590
 ID ADH78590 standard; DNA; 18 BP.
 XX
 AC ADH78590;
 XX
 XX 22-APR-2004 (first entry)
 DT
 DE Test element oligonucleotide #2.
 XX
 XX Fluid functional property; fluid flow pattern;
 KW fluid reagent distribution; time dependent fluid reactivity; ss.
 KW
 XX Synthetic.
 OS
 XX US2003232343-A1.
 PN
 XX 18-DEC-2003.
 PD
 XX 14-JUN-2002; 2002US-00172675.
 PF
 XX 14-JUN-2002; 2002US-00172675.
 PR
 XX (LEPR/) LEPROUST E M.
 PA (AMOR/) AMORESE D A.
 PA (PECK/) PECK B J.
 XX
 XX Leproust EM, Amorese DA, Peck BJ;
 PI
 XX WPI; 2004-061269/06.
 XX
 XX Determining a functional property of fluid in chamber by introducing a
 PT support comprising test elements having reaction and detection domains,
 PT introducing a test fluid, and detecting locations not reactive with the
 PT fluid.
 XX
 XX Example 2; SEQ ID NO 2; 22pp; English.
 PS
 XX The invention relates to a method of determining a functional property of

CC a fluid in a chamber comprising introducing into the chamber a support to
 CC which is bound several test elements, each of the test elements
 CC comprising a reaction domain and a detection domain, introducing into the
 CC chamber a fluid that is interactive with the reaction domains, removing
 CC the fluid from the chamber, determining by means of the detection domains
 CC the locations at which the fluid has not interacted with the reaction
 CC domains, and relating the locations to the functional property of the
 CC fluid. The reaction domains involves nucleotides. The detection domain
 CC comprises a member of a specific binding pair. The determining of the
 CC step involves treating the test elements to modify only those reaction
 CC domains that have interacted with the fluid. The functional property is
 CC chosen from the flow pattern of the fluid, reagent distribution within
 CC the fluid and time dependent reactivity of the fluid. The method is
 CC useful for determining a functional property of a fluid in a chamber and
 CC for synthesizing arrays of biopolymers e.g., arrays of polynucleotides.
 CC The method provides for the characterisation of a new fluid in a known
 CC flow cell, a known fluid in a new flow cell or a new fluid/flow cell
 CC combination. This sequence represents a test element used in the method
 CC of the invention.
 XX

SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726

DB 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1084

ADO28710

ID ADO28710 standard; DNA; 18 BP.

XX

AC ADO28710;

XX 15-JUL-2004 (first entry)

XX Single stranded cDNA production poly-A-tail seqid 6.

XX single stranded cDNA; adaptor-mediated process; cDNA synthesis;

KW poly-A-tail; ss.

XX Synthetic.

XX US6706476-B1.

XX 16-MAR-2004.

XX 09-MAR-2001; 2001US-00803263.

XX 22-AUG-2000; 2000US-0226954P.

XX (AZIG-) AZIGN BIOSCIENCE AS.

XX Thirstrup K, Warthoe P, Pettersson NB;

XX WPI; 2004-326403/30.

XX Synthesizing single stranded cDNA, involves annealing cDNA synthesis
 PT primer to RNA and synthesizing first cDNA strand, ligating adaptor to
 PT single stranded cDNA using DNA ligase, and amplifying ligated single
 PT stranded cDNA fragment.
 XX

PS Example 1; SEQ ID NO 6; 22pp; English.

XX The invention describes a method of synthesizing single stranded cDNA by
 CC a 5'-ligated adaptor-mediated process involving: annealing a cDNA
 CC synthesis primer to RNA, separating the cDNA strand from the RNA,
 CC purifying the cDNA, contacting the cDNA with an adaptor, ligating the
 CC adaptor through 5'-phosphate on strand (ii) of the adaptor to single
 CC stranded using DNA ligase, and amplifying the obtained ligated single

CC stranded fragment in an molecular amplification procedure. The method is
 CC useful for: synthesising a single stranded cDNA by a 5'-ligated adaptor-
 CC mediated process, where the source of nucleic acid is chosen from blood,
 CC serum, plasma, cerebrospinal fluid, urine, tissue samples, biopsies and
 CC saliva. The tissue sample comprises a cell population which may be single
 CC cell, 100-1000000 cells or more as desired; making a cDNA library from a
 CC collection of mRNA molecules in a sample, where the method is applied to
 CC amplify the cDNAs corresponding to the mRNAs by annealing one or more
 CC cDNA synthesis primers to several mRNAs in the sample; producing a
 CC subtrative hybridisation probe which involves synthesising a double-
 CC stranded cDNA collection from a first mRNA population by the method,
 CC where primer 1 is modified by biotin in the 5' end, isolating the biotin-
 CC containing single stranded cDNA (sense) by use of streptavidin coated
 CC magnetic beads, synthesising a double-stranded cDNA collection from a
 CC second mRNA population according to the method, isolating the non-biotin-
 CC containing single stranded cDNA (anti-sense) by use of streptavidin
 CC coated magnetic beads, hybridising the sense to the anti-sense cDNA,
 CC where an unhybridised sub-population of the anti-sense cDNA is found,
 CC isolating the unhybridised sub-population of the anti-sense cDNA by use of
 CC streptavidin coated cDNA, and generating a second double-stranded cDNA
 CC collection from the unhybridised sub-population by PCR using primer 1 and
 CC primer 2; and detecting expression of a gene in a pre-selected cell
 CC population. The method is an improved method for producing amplified
 CC heterogeneous populations of cDNA from limited quantities of RNA or other
 CC nucleic acid. This sequence represents a poly-A-tail used to in the
 CC production single stranded cDNA.

SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1085

ADO28711/c

ID ADO28711 standard; DNA; 18 BP.

AC ADO28711;

XX 15-JUL-2004 (first entry)

XX Single stranded cDNA production poly-A-tail complement seqid 7.

XX single stranded cDNA; adaptor-mediated process; cDNA synthesis;

KW poly-A-tail; ss.

XX Synthetic.

XX US6706476-B1.

XX 16-MAR-2004.

XX 09-MAR-2001; 2001US-00803263.

XX 22-AUG-2000; 2000US-0226954P.

XX (AZIG-) AZIGN BIOSCIENCE AS.

XX Thirstrup K, Warthoe P, Pettersson NB;

XX WPI; 2004-326403/30.

XX Synthesizing single stranded cDNA, involves annealing cDNA synthesis
 PT primer to RNA and synthesizing first cDNA strand, ligating adaptor to
 PT single stranded cDNA using DNA ligase, and amplifying ligated single
 PT stranded cDNA fragment.

PS Example 1; SEQ ID NO 7; 22pp; English.

XX

CC The invention describes a method of synthesising single stranded cDNA by
 CC a 5'-ligated adaptor-mediated process involving: annealing a cDNA
 CC synthesis primer to RNA, separating the cDNA strand from the RNA,
 CC purifying the cDNA, contacting the cDNA with an adaptor, ligating the
 CC adaptor through 5'-phosphate on strand (ii) of the adaptor to single
 CC stranded using DNA ligase, and amplifying the obtained ligated single
 CC stranded fragment in an molecular amplification procedure. The method is
 CC useful for: synthesising a single stranded cDNA by a 5'-ligated adaptor-
 CC mediated process, where the source of nucleic acid is chosen from blood,
 CC serum, plasma, cerebrospinal fluid, urine, tissue samples, biopsies and
 CC saliva. The tissue sample comprises a cell population which may be single
 CC cell, 100-1000000 cells or more as desired; making a cDNA library from a
 CC collection of mRNA molecules in a sample, where the method is applied to
 CC amplify the cDNAs corresponding to the mRNAs by annealing one or more
 CC cDNA synthesis primers to several mRNAs in the sample; producing a
 CC subtrative hybridisation probe which involves synthesising a double-
 CC stranded cDNA collection from a first mRNA population by the method,
 CC where primer 1 is modified by biotin in the 5' end, isolating the biotin-
 CC containing single stranded cDNA (sense) by use of streptavidin coated
 CC magnetic beads, synthesising a double-stranded cDNA collection from a
 CC second mRNA population according to the method, isolating the non-biotin-
 CC containing single stranded cDNA (anti-sense) by use of streptavidin
 CC coated magnetic beads, hybridising the sense to the anti-sense cDNA,
 CC where an unhybridised sub-population of the anti-sense cDNA is found,
 CC isolating the unhybridised sub-population of the anti-sense cDNA by use of
 CC streptavidin coated cDNA, and generating a second double-stranded cDNA
 CC collection from the unhybridised sub-population by PCR using primer 1 and
 CC primer 2; and detecting expression of a gene in a pre-selected cell
 CC population. The method is an improved method for producing amplified
 CC heterogeneous populations of cDNA from limited quantities of RNA or other
 CC nucleic acid. This sequence represents the complement of a poly-A-tail
 CC used to in the production single stranded cDNA.

SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 8.7e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726

Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1086

ADO26684/c

ID ADO26684 standard; DNA; 18 BP.

XX ADO26684;

XX 12-AUG-2004 (first entry)

XX Synthetic leader sequence encoding DNA SEQ ID NO:77.

XX phenotype; phenotypic preference; phenotype modulation; leader; ds.

XX Synthetic.

XX WO2004042059-A1.

XX 21-MAY-2004.

XX 10-NOV-2003; 2003WO-AU001487.

XX 08-NOV-2002; 2002US-0425163P.

XX (UYQU) UNIV QUEENSLAND.

XX Frazer IH;

XX WPI; 2004-411519/38.

DR P-PSDB; ADO26685.

```
XX Constructing synthetic polynucleotide for modulating the quality of a
PT selected phenotype displayed by an organism comprises replacing a first
PT codon with a synonymous codon to construct the synthetic polynucleotide.
XX
XX Example 1; SEQ ID NO 77; 86pp; English.
XX
XX The present invention describes a method for constructing a synthetic
CC polynucleotide from which a polypeptide is producible to confer a
CC selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. The method comprises: (a) selecting a first codon of
CC the parent polynucleotide for replacement with a synonymous codon, where
CC the synonymous codon is selected on the basis that it exhibits a
CC different phenotypic preference than the first codon in an organism of
CC phenotypic preferences in test organisms or parts, where the test
CC organism are selected from organisms of the same species as the organism
CC of interest and organisms that are related to the organisms of interest;
CC and (b) replacing the first codon with the synonymous codon to construct
CC the synthetic polynucleotide. Also described: (1) a method for
CC determining the phenotypic preference of a first codon in an organism of
CC interest or its parts; (2) a synthetic polynucleotide constructed from
CC the method above; (3) an organism or interest or part containing a
CC synthetic polynucleotide constructed from the method above; (4) an
CC organism or interest or part containing a synthetic construct that
CC comprises a regulatory polynucleotide operably linked to a tandem repeat
CC of a first codon fused in frame with a reporter polynucleotide that
CC encodes a reporter protein, which produces, or is predicted to produce a
CC selected phenotype or a phenotype of the same class as the selected
CC phenotype in the organism or part; (5) a method of modulating the quality
CC of a selected phenotype that is displayed by an organism of interest or
CC part and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; (6) a method of enhancing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; and (7) a method of reducing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide. The method is useful for constructing a
CC synthetic polynucleotide from which a polypeptide is producible to confer
CC a selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. It is useful for modulating the quality of a selected
CC phenotype displayed by an organism or part. The present sequence encodes
CC a synthetic leader sequence, which is used in an example from the present
XX invention.
XX
XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 8.7e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 1087
AD026682
ID AD026682 standard; DNA; 18 BP.
XX
XX AD026682;
XX AC
XX 12-AUG-2004 (first entry)
XX
XX Synthetic leader sequence encoding DNA SEQ ID NO:75.
XX
XX phenotype; phenotypic preference; phenotype modulation; leader; db.
XX
XX Synthetic.
XX
XX WO2004042059-A1.
XX
XX
```

```
XX 21-MAY-2004.
PD
XX 10-NOV-2003; 2003WO-AU001487.
PF
XX 08-NOV-2002; 2002US-0425163P.
PR
XX (UYQU ) UNIV QUEENSLAND.
PA
XX Frazer IH;
PI
XX WPI; 2004-411519/38.
XX P-PSDB; ADO26683.
DR
XX Constructing synthetic polynucleotide for modulating the quality of a
PT selected phenotype displayed by an organism comprises replacing a first
PT codon with a synonymous codon to construct the synthetic polynucleotide.
XX
XX Example 1; SEQ ID NO 75; 86pp; English.
XX
XX The present invention describes a method for constructing a synthetic
CC polynucleotide from which a polypeptide is producible to confer a
CC selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. The method comprises: (a) selecting a first codon of
CC the parent polynucleotide for replacement with a synonymous codon, where
CC the synonymous codon is selected on the basis that it exhibits a
CC different phenotypic preference than the first codon in a comparison of
CC phenotypic preferences in test organisms or parts, where the test
CC organism are selected from organisms of the same species as the organism
CC of interest and organisms that are related to the organisms of interest;
CC and (b) replacing the first codon with the synonymous codon to construct
CC the synthetic polynucleotide. Also described: (1) a method for
CC determining the phenotypic preference of a first codon in an organism of
CC interest or its parts; (2) a synthetic polynucleotide constructed from
CC the method above; (3) an organism or interest or part containing a
CC synthetic polynucleotide constructed from the method above; (4) an
CC organism or interest or part containing a synthetic construct that
CC comprises a regulatory polynucleotide operably linked to a tandem repeat
CC of a first codon fused in frame with a reporter polynucleotide that
CC encodes a reporter protein, which produces, or is predicted to produce a
CC selected phenotype or a phenotype of the same class as the selected
CC phenotype in the organism or part; (5) a method of modulating the quality
CC of a selected phenotype that is displayed by an organism of interest or
CC part and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; (6) a method of enhancing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide; and (7) a method of reducing the quality of a
CC selected phenotype that is displayed by an organism of interest or part
CC and that results from the expression of a parent polynucleotide that
CC encodes the polypeptide. The method is useful for constructing a
CC synthetic polynucleotide from which a polypeptide is producible to confer
CC a selected phenotype to an organism of interest or part in a different
CC quality than that conferred by a parent polynucleotide that encodes the
CC same polypeptide. It is useful for modulating the quality of a selected
CC phenotype displayed by an organism or part. The present sequence encodes
CC a synthetic leader sequence, which is used in an example from the present
XX invention.
XX
XX Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 8.7e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 1 AAAAAAAAAAAAAAAAAA 18
XX
RESULT 1088
ADP86130/c
XX
```

```

ID ADP86130 standard; DNA; 18 BP.
AC ADP86130;
XX
DT 09-SEP-2004 (first entry)
XX
DE CpG immunostimulatory oligonucleotide #1.
XX
KW CpG immunostimulatory oligonucleotide; immune response; allergy; asthma;
KW viral infection; bacterial infection; cancer; lymphoma;
KW intraepithelial neoplasm; melanoma; neuroblastoma; Hodgkin's lymphoma;
KW carcinoma; sarcoma; gene therapy; phosphorothioate; ss.
XX
OS Unidentified.
XX
FH Key Location/Qualifiers
FT modified_base 1..18
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "Phosphorothioate backbone"
XX
FN WO2004053104-A2.
XX
PD 24-JUN-2004.
XX
PF 11-DEC-2003; 2003WO-US039775.
XX
PR 11-DEC-2003; 2002US-0432409P.
PR 25-SEP-2003; 2003US-0506108P.
XX
PA (COLE-) COLEY PHARM GROUP INC.
PA (COLE-) COLEY PHARM GMBH.
XX
PI Krieg AM, Jurk M, Vollmer J, Uhlmann E;
XX
DR WPI; 2004-487902/46.
XX
PT New oligonucleotides, useful for treating allergy or asthma, viral and
PT bacterial infections, and cancer, e.g. biliary tract cancer, breast
PT cancer, cervical cancer.
XX
PS Example; SEQ ID NO 1; 104pp; English.
XX
CC The invention relates to a class of CpG immunostimulatory
CC oligonucleotides containing a 5'TCG motif or a CG at or the 5' end that
CC are useful for stimulating an immune response. Oligonucleotides and
CC compositions of the invention are useful for treating allergy or asthma,
CC viral and bacterial infections and cancer e.g. biliary tract cancer,
CC breast cancer, cervical cancer, choriocarcinoma, colon cancer,
CC endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
CC liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
CC neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,
CC rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
CC and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,
CC Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
CC testicular cancer, as well as other carcinomas and sarcomas. The
CC invention is also useful in gene therapy. The present sequence is a CpG
CC immunostimulatory oligonucleotide.
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1089
ADR32355/C
ID ADR32355 standard; DNA; 18 BP.
XX
AC ADR32355;
XX
DT 04-NOV-2004 (first entry)
XX
DE Rat KDR cytosolic domain cloning RT-PCR primer.
XX
KW Rat; receptor tyrosine kinase; KDR; therapy; cancer;
KW ischaemic ocular disease; proliferative retinopathy; inflammation;
KW reverse transcription; RT; PCR; primer; ss.
XX
OS Rattus norvegicus.
XX
FN WO2004070004-A2.
XX
PD 19-AUG-2004.
XX
PF 23-JAN-2004; 2004WO-US001928.
XX
PR 29-JAN-2003; 2003US-0443335P.
XX
PA (MERI ) MERCK & CO INC.
XX
PI Thomas RA, Pan B, Mcgaughey GB;
XX
DR WPI; 2004-604425/58.
XX
PT New nucleic acid molecules encoding rat KDR protein, useful for
PT identifying inhibitors of KDR activity for treating cancer, ischemic
PT ocular diseases, and inflammation.
XX
PS Example 2; Page 30; 77pp; English.
XX
CC The invention relates to rat receptor tyrosine kinase (KDR) and its
CC corresponding nucleic acid sequence. The nucleic acid molecules of the
CC invention are useful for identifying compounds that modulate wild-type
CC rat KDR activity to evaluate the safety and efficacy of specific
CC inhibitors of KDR in rats. KDR inhibitors are useful for treating cancer,
CC ischaemic ocular diseases such as proliferative retinopathy and
CC inflammation. The present sequence is a reverse transcription (RT) PCR
CC primer used for cloning rat KDR cytosolic domain. This sequence is used
CC in the exemplification of the invention.
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1090
ADR57967/C
ID ADR57967 standard; DNA; 18 BP.
XX
AC ADR57967;
XX
DT 18-NOV-2004 (first entry)
XX
DE Nucleotide #4 for signal amplification method.
XX
KW ss; signal amplification method; gene expression; reverse transcription;
KW self-assembly reaction; DNA chip.
XX
OS Unidentified.
XX
FN WO2004072302-A1.
XX
PD 26-AUG-2004.
XX

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```

PF 13-FEB-2004; 2004WO-JP001588.
XX
PR 14-FEB-2003; 2003JP-00037212.
XX
PA (PALM-) PALMA BEEZ RES INST CO LTD.
XX
PI Ueui M, Fujikawa T;
XX
DR WPI; 2004-642306/62.
XX
PT Signal amplification method for detecting expressed gene, by using
PT reverse transcription reaction and self-assembly reaction of
PT oligonucleotide probes.
XX
PS Disclosure; SEQ ID NO 4; 27pp; Japanese.
XX
CC The invention relates to a signal amplification method (M1) for detecting
CC expressed gene using reverse transcription reaction and a self-assembly
CC reaction of forming a self assembly of oligonucleotide probes, thus
CC improving detection sensitivity of the expressed gene in a DNA chip. (M1)
CC is useful for signal amplification method (M1) for detecting expressed
CC gene (claimed). (M1) improves detection sensitivity of the expressed gene
CC in a DNA chip (claimed). (M1) does not require use of expensive enzymes
CC and enables detection corresponding to the original RNA length or
CC expression amount because of using neither linear amplification nor PCR.
CC This sequence corresponds to a nucleotide used in the method of the
CC invention.
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1091
ADT55010/c
ID ADT55010 standard; RNA; 18 BP.
XX
AC ADT55010;
XX
DT 30-DEC-2004 (first entry)
XX
DE Amplified RNA (arRNA) preparation method-related RNA sequence #1.
XX
KW amplified RNA preparation; nervous system disorder;
KW neurodegenerative disease; Parkinson's disease; Alzheimer's disease;
KW multiple sclerosis; psychiatric disorder; schizophrenia;
KW affective disorder; manic depression; lack of appetite control;
KW attention deficit disorder; cancer cell detection; ss.
XX
OS Synthetic.
XX
WO2004085681-A2.
XX
PD 07-OCT-2004.
XX
PF 19-MAR-2004; 2004WO-US0008553.
XX
PR 21-MAR-2003; 2003US-0456825P.
XX
PA (ARCT-) ARCTURUS BIOSCIENCE INC.
XX
PI Erlander MG, Salunga RC, Ma X, Enright E;
XX
DR WPI; 2004-710328/69.
XX
PT Preparing amplified RNA (arRNA) sequences present in single stranded or
PT made single stranded target polynucleotide(s), useful for detecting
XX
XX Example 1; Fig 1; 46pp; English.

```

```

PT cancer cells, comprises transcribing double stranded cDNA templates with
PT an RNA polymerase.
XX
PS Disclosure; Fig 2; 46pp; English.
XX
CC The invention comprises a method of preparing amplified RNA (arRNA)
CC sequences present in one or more target polynucleotide that is single
CC stranded or made single stranded. The method involves forming double
CC stranded cDNA templates containing sequences present in the target
CC polynucleotide and transcribing the cDNA templates with an RNA polymerase
CC capable of initiating transcription via the promoter region to produce
CC amplified RNA containing sequences of the target polynucleotide. The
CC method of the invention is useful for amplifying the population of RNAs
CC extracted from formalin-fixed tissues and/or the population of mRNA
CC splice variants. The method is also useful for determining gene
CC expression in neuronal and non-neuronal cells involved in disorders of
CC the nervous system, such as: neurodegenerative diseases (e.g. Parkinson's
CC disease, Alzheimer's disease, and multiple sclerosis); psychiatric
CC disorders (e.g. schizophrenia); and affective disorders (e.g. manic
CC depression, lack of appetite control, and attention deficit disorder).
CC The method of the invention may also be used to detect cancer cells, and
CC to facilitate diagnosis/prognosis of cancer in a patient. The present RNA
CC sequence is shown in a figure exemplifying the method of the invention.
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 0 T; 18 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1092
ADT55008
ID ADT55008 standard; DNA; 18 BP.
XX
AC ADT55008;
XX
DT 30-DEC-2004 (first entry)
XX
DE Amplified RNA (arRNA) preparation method-related DNA sequence #4.
XX
KW amplified RNA preparation; nervous system disorder;
KW neurodegenerative disease; Parkinson's disease; Alzheimer's disease;
KW multiple sclerosis; psychiatric disorder; schizophrenia;
KW affective disorder; manic depression; lack of appetite control;
KW attention deficit disorder; cancer cell detection; ds.
XX
OS Synthetic.
XX
WO2004085681-A2.
XX
PD 07-OCT-2004.
XX
PF 19-MAR-2004; 2004WO-US0008553.
XX
PR 21-MAR-2003; 2003US-0456825P.
XX
PA (ARCT-) ARCTURUS BIOSCIENCE INC.
XX
PI Erlander MG, Salunga RC, Ma X, Enright E;
XX
DR WPI; 2004-710328/69.
XX
PT Preparing amplified RNA (arRNA) sequences present in single stranded or
PT made single stranded target polynucleotide(s), useful for detecting
PT cancer cells, comprises transcribing double stranded cDNA templates with
PT an RNA polymerase.
XX
XX Example 1; Fig 1; 46pp; English.

```

XX CC The invention comprises a method of preparing amplified RNA (aRNA)
 CC sequences present in one or more target polynucleotide that is single
 CC stranded or made single stranded. The method involves forming double
 CC stranded cDNA templates containing sequences present in the target
 CC polynucleotide and transcribing the cDNA templates with an RNA polymerase
 CC capable of initiating transcription via the promoter region to produce
 CC amplified RNA containing sequences of the target polynucleotide. The
 CC method of the invention is useful for amplifying the population of mRNAs
 CC extracted from formalin-fixed tissues and/or the population of mRNAs
 CC splice variants. The method is also useful for determining gene
 CC expression in neuronal and non-neuronal cells involved in disorders of
 CC the nervous system, such as: neurodegenerative diseases (e.g. Parkinson's
 CC disease, Alzheimer's disease, and multiple sclerosis); psychiatric
 CC disorders (e.g. schizophrenia); and affective disorders (e.g. manic
 CC depression, lack of appetite control, and attention deficit disorder).
 CC The method of the invention may also be used to detect cancer cells, and
 CC to facilitate diagnosis/prognosis of cancer in a patient. The present DNA
 CC sequence is shown in a figure exemplifying the method of the invention.

XX SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1093
 ADN30833/c
 ID ADN30833 standard; DNA; 18 BP.

XX AC ADN30833;
 XX
 XX
 XX 13-JAN-2005 (first entry)
 DE PCR primer, SEQ 112.

XX Virucide; Vaccine; influenza virus infection;
 KW influenza virus replication; short interfering RNA; siRNA;
 KW short hairpin RNA; shRNA; ss; PCR; primer.

XX Synthetic.
 OS
 XX
 XX WO2004028471-A2.
 PN
 XX 08-APR-2004.
 PD
 XX 29-SEP-2003; 2003WO-US030502.
 PF
 XX 28-SEP-2002; 2002US-0414457P.
 PR
 XX 10-FEB-2003; 2003US-0446377P.
 PR
 XX (MASI) MASSACHUSETTS INST TECHNOLOGY.
 PA
 XX Chen J, Eisen HN, Ge Q;
 PI
 XX WPI; 2004-305101/28.
 DR
 XX
 XX New composition comprising an siRNA or shRNA targeted to an agent-
 PT specific transcript, useful for treating or preventing influenza virus
 PT replication, pathogenicity or infectivity.
 XX
 XX Example 4; Page 107; 241pp; English.
 PS
 XX The present invention relates to compositions for inhibiting influenza
 CC infection and/or replication. The compositions comprise a short
 CC interfering RNA (siRNA) or short hairpin RNA (shRNA) targeted to a target
 CC transcript, which is an agent-specific transcript involved in infection
 CC by or replication of influenza A or B virus. The target transcript

CC encodes a protein consisting of hemagglutinin, neuraminidase, membrane
 CC protein 1, membrane protein 2, nonstructural protein 1, nonstructural
 CC protein 2, polymerase protein PB1, polymerase protein PB2, polymerase
 CC protein PA or polymerase protein NP. The composition is useful for
 CC treating or preventing influenza virus replication, pathogenicity or
 CC infectivity. The present sequence is a PCR primer used during siRNA
 CC preparation.

XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
 |||||
 Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1094
 ADU90255/c
 ID ADU90255 standard; DNA; 18 BP.

XX AC ADU90255;
 XX
 XX 10-FEB-2005 (first entry)
 DT
 XX
 XX Allergic response suppressor oligonucleotide #939.

XX ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
 KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
 KW immunostimulant; asthma; rhinitis; urticaria; dermatitis;
 KW bacterial infection; viral infection.

XX Synthetic.
 OS
 XX US2004235774-A1.
 PN
 XX 25-NOV-2004.
 PD
 XX 23-APR-2004; 2004US-00831778.
 PF
 XX 03-FEB-2000; 2000US-0179991P.
 PR
 XX 02-FEB-2001; 2001US-00776479.
 PR
 XX (BRAT/) BRATZLER R L.
 PA (PETE/) PETERSEN D M.
 PA (FOUR/) FOURON Y.
 XX
 XX Bratzler RL, Petersen DM, Fouron Y;
 PI
 XX WPI; 2004-833006/82.
 DR
 XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic
 PT dermatitis, in a subject, comprises administering a first and second dose
 PT of an immunostimulatory nucleic acid.

XX Disclosure; SEQ ID NO 939; 235pp; English.
 PS
 XX The invention relates to a method of suppressing a symptom of an allergic
 CC response in a subject by administering a first and second dose of an
 CC immunostimulatory nucleic acid that comprises a nucleotide sequence
 CC comprising 5'-cg-3', and where the second dose is administered from 1 day
 CC to 8 weeks after the first dose. The methods and compositions of the
 CC present invention are useful for the treatment or prevention of asthma
 CC and allergy, including rhinitis, urticaria and atopic dermatitis, using
 CC an immunostimulatory nucleic acid alone or in combination with other
 CC medicaments. They can also be used in preventing bacterial and viral
 CC infections. This sequence represents an oligonucleotide used in the
 CC method of the invention.

XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1095
 ADU90229/c
 ID ADU90229 standard; DNA; 18 BP.
 XX
 AC ADU90229;
 XX
 XX 10-FEB-2005 (first entry)
 XX
 XX Allergic response suppressor oligonucleotide #913.
 XX ss; antiasthmatic; antiallergic; dermatological; antiinflammatory;
 KW antibacterial; virucide; immunoglobulin E antagonist; allergy;
 KW immunostimulator; asthma; rhinitis; urticaria; dermatitis;
 KW bacterial infection; viral infection.
 XX
 OS Synthetic.
 XX
 XX US2004235774-A1.
 XX
 XX 25-NOV-2004.
 XX
 XX 23-APR-2004; 2004US-00831778.
 XX
 XX 03-FEB-2000; 2000US-0179991P.
 XX 02-FEB-2001; 2001US-00776479.
 XX
 XX (BRATZLER R L.
 PA (PETE)/ PETERSEN D M.
 PA (FOUR)/ FOURON Y.
 XX
 XX Bratzler RL, Petersen DM, Fouron Y;
 PI
 XX WPI; 2004-833006/82.
 XX
 XX Suppressing allergies, including asthma, rhinitis, urticaria and atopic
 PT dermatitis, in a subject, comprises administering a first and second dose
 PT of an immunostimulatory nucleic acid.
 XX
 XX Disclosure; SEQ ID NO 913; 235pp; English.

The invention relates to a method of suppressing a symptom of an allergic response in a subject by administering a first and second dose of an immunostimulatory nucleic acid that comprises a nucleotide sequence comprising 5'-cg-3', and where the second dose is administered from 1 day to 8 weeks after the first dose. The methods and compositions of the present invention are useful for the treatment or prevention of asthma and allergy, including rhinitis, urticaria and atopic dermatitis, using an immunostimulatory nucleic acid alone or in combination with other medicaments. They can also be used in preventing bacterial and viral infections. This sequence represents an oligonucleotide used in the method of the invention.

XX
 XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1096

ADX56134/c
 ID ADX56134 standard; DNA; 18 BP.
 XX
 AC ADX56134;
 XX
 XX 21-APR-2005 (first entry)
 XX
 XX Novel recombinant Sabin type 1 poliovirus vector-related PCR primer #13.
 DE vaccine; Sabin type 1 poliovirus; vector; poliovirus infection; PCR;
 KW primer; ss.
 XX
 OS Unidentified.
 XX
 XX KR2004050346-A.
 XX
 XX 16-JUN-2004.
 XX
 XX 10-DEC-2002; 2002KR-00078159.
 XX
 XX 10-DEC-2002; 2002KR-00078159.
 PR (CREA-) CREAGENE INC.
 XX
 XX Bae YS, Jung HR, Kim DY, Kim GT, Lee DS, Lee SG;
 PI WPI; 2004-715997/70.
 XX
 XX Recombinant sabin type 1 poliovirus vector and recombinant vaccine
 PT composition against poliovirus.
 XX.
 PS Example; Page 14; 32pp; Korean.
 XX
 XX This invention relates to a novel recombinant Sabin type 1 poliovirus
 CC vector and a recombinant vaccine composition against poliovirus, which
 CC may induce the formation of neutralizing antibodies against Sabin types
 CC 1, 2 and 3 polioviruses, and prevent the side-effects of Opv (attenuated
 CC oral polio vaccine, Sabin). The present sequence is that of a PCR primer
 CC which was used during the development of the novel recombinant Sabin type
 CC 1 poliovirus vector of the invention.
 XX
 XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
 DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1097
 ADV11817/c
 ID ADV11817 standard; DNA; 18 BP.
 XX
 AC ADV11817;
 XX
 XX 24-MAR-2005 (revised)
 DT 24-FEB-2005 (first entry)
 XX
 XX Poly (dT)12-18 oligo, SEQ ID NO:150, used in first strand cDNA synthesis.
 DE Antisense therapy; thioredoxin inhibitor; ss.
 XX
 XX Synthetic.
 OS
 XX Key Location/Qualifiers
 FT misc_feature 13..18
 FT /*tag= a
 FT /note= "Optionally and serially deleted"
 XX
 XX US2004241717-A1.

XX PD 02-DEC-2004.
XX AC
XX PF 10-FEB-2004; 2004US-00776933.
XX PF
XX PR 10-FEB-2003; 2003US-0446374P.
XX PR
XX PA (SANT-) SANTARIS PHARMA AS.
XX PA
XX PI Hansen B, Thru CA, Westergaard M, Petersen KD, Wissenbach M;
XX PI
XX DR WPI; 2005-056301/06.
XX DR
XX FT Novel compound useful for modulating expression of gene involved in
XX FT cancer disease, or for modulating red blood cell proliferation, cellular
XX FT proliferation, ion metabolism or glucose and energy metabolism.
XX FT
XX PS Example 6; SEQ ID NO 150; 92pp; English.
XX PS
XX CC The invention relates to antisense oligonucleotides consisting of 8-50
XX CC nucleotides and/or nucleotide analogs which inhibit expression of the
XX CC putative human oncogene thioresoxin (TRX). The antisense oligonucleotides
XX CC comprise a subsequence of 8 or more nucleotides or nucleotide analogs,
XX CC wherein the subsequence is located within a sequence selected from
XX CC ADV11669-ADV11724. The oligonucleotides preferably contain at least
XX CC nucleotide analog, especially a locked nucleic acid (LNA) or a modified
XX CC nucleobase selected from 5-methylcytosine, isocytosine,
XX CC pseudocytosine, 5-bromouracil, 5-propynyluracil, 6-aminopurine, 2-
XX CC aminopurine, inosine, diaminopurine and 2-chloro-6-aminopurine. The
XX CC invention also relates to a conjugate comprising a TRX antisense
XX CC oligonucleotide of the invention and one or more non-nucleotide or non-
XX CC polynucleotide moieties covalently attached to the oligonucleotide; and a
XX CC pharmaceutical composition comprising a TRX antisense oligonucleotide or
XX CC conjugate of the invention, optionally further comprising a
XX CC chemotherapeutic agent, an antiinflammatory compound or an antiviral
XX CC compound. The TRX antisense oligonucleotides, and conjugates and
XX CC compositions containing them, are useful in the treatment of cancers such
XX CC as carcinomas (e.g., malignant melanoma, basal cell carcinoma, ovarian
XX CC carcinoma, breast carcinoma, non-small cell lung cancer, renal cell
XX CC carcinoma, bladder carcinoma, recurrent superficial bladder cancer,
XX CC stomach carcinoma, prostatic carcinoma, pancreatic carcinoma, lung
XX CC carcinoma, cervical carcinoma, colorectal dysplasia, laryngeal
XX CC papillomatosis, colon carcinoma, colorectal carcinoma and carcinoma
XX CC tumors); sarcomas (e.g., osteosarcoma, Ewing's sarcoma, chondrosarcoma,
XX CC malignant fibrous histiocytoma, fibrosarcoma, and Kaposi's sarcoma); or
XX CC gliomas. The TRX antisense oligonucleotides are also useful in the
XX CC treatment of conditions such as atherosclerosis, psoriasis, diabetic
XX CC retinopathy, rheumatoid arthritis, asthma, warts, and allergic
XX CC dermatitis. They may additionally be used for inhibiting cellular
XX CC proliferation and for modulating red blood cell proliferation, ion
XX CC metabolism, glucose and energy metabolism, pH regulation, matrix
XX CC metabolism, apoptosis, cytokinesis or the cell cycle. The TRX antisense
XX CC oligonucleotides of the invention have increased specificity and affinity
XX CC for TRX mRNA, and are resistant to degradation. The present sequence
XX CC represents a poly (dT)12-18 oligonucleotide used in first strand
XX CC synthesis of human thioresoxin cDNA in an example of the invention.
XX CC
XX CC Revised record issued on 24-MAR-2005 : Correction to organism field
XX CC
XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
XX SQ
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1098
ADW10182/c
ID ADW10182 standard; DNA; 18 BP.

XX AC ADW10182;
XX DT 07-APR-2005 (first entry)
XX DE Poly (dT)12-18 oligo, SEQ ID NO:741, used in first strand cDNA synthesis.
XX KW Antisense therapy; apoptosis stimulation; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT misc_feature 13..18
XX FT /*tag= a
XX FT /note= "Optionally and serially deleted"
XX PN US2005014712-A1.
XX PD 20-JAN-2005.
XX PF 10-FEB-2004; 2004US-00776934.
XX PR 10-FEB-2003; 2003US-0446372P.
XX PR 19-NOV-2003; 2003US-0523591P.
XX PA (HANS/) HANSEN B.
XX PA (THRU/) THRU C A.
XX PA (WEST/) WESTERGAARD M.
XX PA (PETE/) PETERSEN K D.
XX PA (WISS/) WISSENBACH M.
XX PI Hansen B, Thru CA, Westergaard M, Petersen KD, Wissenbach M;
XX WPI; 2005-1006663/11.
XX CC New oligomeric compound for the modulation of survivin, useful for
XX CC treating e.g. cancers, atherosclerosis, psoriasis, diabetic retinopathy,
XX CC rheumatoid arthritis, asthma, warts, or allergic dermatitis.
XX PS Example 6; SEQ ID NO 741; 264pp; English.
XX CC The invention relates to antisense oligonucleotides consisting of 8-50
XX CC nucleotides and/or nucleotide analogs which inhibit expression of human
XX CC survivin, an inhibitor of apoptosis which is also essential for cell
XX CC division and angiogenesis. The antisense oligonucleotides comprise a
XX CC subsequence of 8 or more nucleotides or nucleotide analogs, wherein the
XX CC subsequence is located within a sequence selected from ADW09444-ADW09586.
XX CC The oligonucleotides preferably contain one or more (preferably 6-10)
XX CC nucleotide analogs, especially a locked nucleic acid (LNA), and also
XX CC preferably contain a linkage group selected from a phosphate group, a
XX CC phosphorothioate group or a boranophosphate group. The invention also
XX CC relates to a conjugate comprising a survivin antisense oligonucleotide of
XX CC the invention and one or more non-nucleotide or non-polynucleotide
XX CC moieties covalently attached to the oligonucleotide; and a pharmaceutical
XX CC composition comprising a survivin antisense oligonucleotide or conjugate
XX CC of the invention, optionally further comprising a chemotherapeutic agent.
XX CC The survivin antisense oligonucleotides, and conjugates and compositions
XX CC containing them, are useful in the treatment of cancers such as
XX CC carcinomas (e.g., malignant melanoma, basal cell carcinoma, ovarian
XX CC carcinoma, breast carcinoma, non-small cell lung cancer, renal cell
XX CC carcinoma, bladder carcinoma, recurrent superficial bladder cancer,
XX CC stomach carcinoma, prostatic carcinoma, pancreatic carcinoma, lung
XX CC carcinoma, cervical carcinoma, colorectal dysplasia, laryngeal
XX CC papillomatosis, colon carcinoma, colorectal carcinoma and carcinoma
XX CC tumors); sarcomas (e.g., osteosarcoma, Ewing's sarcoma, chondrosarcoma,
XX CC malignant fibrous histiocytoma, fibrosarcoma, and Kaposi's sarcoma); or
XX CC gliomas. The survivin antisense oligonucleotides are also useful in the
XX CC treatment of conditions such as atherosclerosis, psoriasis, diabetic
XX CC retinopathy, rheumatoid arthritis, asthma, warts, and allergic
XX CC dermatitis. They may additionally be used for inhibiting cellular
XX CC proliferation, for modulating apoptosis and for treating a disease
XX CC related to abnormal angiogenesis. The survivin antisense oligonucleotides
XX CC of the invention are shorter than prior art survivin antisense

CC oligonucleotides (16-mers compared to 20-25-mers), therefore having
CC increased specificity and affinity for survivin mRNA, and also have
CC higher biotability and cell permeability. The present sequence
CC represents a poly (dT)12-18 oligonucleotide used in first strand
CC synthesis of human survivin cDNA in an example of the invention.
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1099
ADW86820/c
ID ADW86820 standard; DNA; 18 BP.
XX
AC ADW86820;
XX
DT 07-APR-2005 (first entry)
XX
DE Protein labelling method sequence #21.
XX
KW DNA purification; protein engineering; diagnosis; ss.
XX
OS Unidentified.
XX
PN WO2004113530-A1.
XX
PD 29-DEC-2004.
XX
PF 18-JUN-2004; 2004WO-JP008953.
XX
PR 18-JUN-2003; 2003JP-00173634.
XX
PA (MITU) MITSUBISHI CHEM CORP.
XX
PI Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;
PI Hashimoto H, Saseki T;
XX
WPI; 2005-075248/08.
XX
Novel polynucleotide having ability to increase labeling efficiency of
PT labeling compound, useful for synthesizing labeled protein in presence of
PT labeling compound.
XX
PS Disclosure; Fig 7A; 140pp; Japanese.
XX
The invention relates to a polynucleotide (I) for synthesizing labeled
CC protein and having ability to increase labeling efficiency of labeling
CC compound, where protein is produced by adding labeling compound to 3',
CC terminal of sequence encoding target protein of gene template, where
CC labeling compound has label portion and acceptor portion having compound
CC capable of binding to C-terminus of label portion and translating gene
CC template in presence of labeled compound. (I) is useful for producing a
CC labeling protein, which involves preparing a gene template by adding (I)
CC to the 3'-terminal of base sequence encoding the target protein.
CC translating the gene template in the presence of the labeling compound
CC containing acceptor portion and label portion, and obtaining protein
CC synthesized in the translation system. The base sequence encoding the
CC target protein either contains the termination codon or does not contain
CC the termination codon. The labeling compound is added after the
CC initiation of the translation. The labeled protein (LPI) is useful in a
CC performance-analysis of a protein, which involves contacting the test
CC substance with (LPI), and analyzing the interaction between the protein
CC and the test substance. (I) has the ability to increase labeling
CC efficiency of a labeling compound and thus effectively produces labeled
CC protein. This sequence corresponds to a sequence used in the method of
CC the invention.

XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1100
ADW86817
ID ADW86817 standard; DNA; 18 BP.
XX
AC ADW86817;
XX
DT 07-APR-2005 (first entry)
XX
DE Protein labelling method sequence #18.
XX
KW DNA purification; protein engineering; diagnosis; ss.
XX
OS Unidentified.
XX
PN WO2004113530-A1.
XX
PD 29-DEC-2004.
XX
PF 18-JUN-2004; 2004WO-JP008953.
XX
PR 18-JUN-2003; 2003JP-00173634.
XX
PA (MITU) MITSUBISHI CHEM CORP.
XX
PI Naka D, Nakano H, Shiratori M, Kobayashi T, Suzuki K;
PI Hashimoto H, Sasaki T;
XX
WPI; 2005-075248/08.
XX
Novel polynucleotide having ability to increase labeling efficiency of
PT labeling compound, useful for synthesizing labeled protein in presence of
PT labeling compound.
XX
PS Disclosure; Fig 7A; 140pp; Japanese.
XX
The invention relates to a polynucleotide (I) for synthesizing labeled
CC protein and having ability to increase labeling efficiency of labeling
CC compound, where protein is produced by adding labeling compound to 3',
CC terminal of sequence encoding target protein of gene template, where
CC labeling compound has label portion and acceptor portion having compound
CC capable of binding to C-terminus of label portion and translating gene
CC template in presence of labeled compound. (I) is useful for producing a
CC labeling protein, which involves preparing a gene template by adding (I)
CC to the 3'-terminal of base sequence encoding the target protein.
CC translating the gene template in the presence of the labeling compound
CC containing acceptor portion and label portion, and obtaining protein
CC synthesized in the translation system. The base sequence encoding the
CC target protein either contains the termination codon or does not contain
CC the termination codon. The labeling compound is added after the
CC initiation of the translation. The labeled protein (LPI) is useful in a
CC performance-analysis of a protein, which involves contacting the test
CC substance with (LPI), and analyzing the interaction between the protein
CC and the test substance. (I) has the ability to increase labeling
CC efficiency of a labeling compound and thus effectively produces labeled
CC protein. This sequence corresponds to a sequence used in the method of
CC the invention.
XX
SQ Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;

```
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 1 AAAAAAAAAAAAAAAAAA 1

RESULT 1101
AEA89505/C
ID AEA89505 standard; DNA; 18 BP.
XX
AC AEA89505;
XX
DT 25-AUG-2005 (first entry)
XX
DE RT-PCR primer used in the expression analysis of HX2004-6.
XX
KW Drug screening; diagnosis; therapeutic; cancer; cytostatic; neoplasm; ss;
KW RT-PCR; reverse transcriptase PCR; primer.
XX
OS Unidentified.
XX
PN US2005130926-A1.
XX
PD 16-JUN-2005.
XX
PF 28-OCT-2004; 2004US-00977087.
XX
PR 04-NOV-1998; 98US-0107112P.
PR 06-JAN-1999; 99US-0114856P.
PR 14-MAY-1999; 99US-0134112P.
PR 26-JUL-1999; 99US-0145612P.
PR 13-AUG-1999; 99US-0148936P.
PR 03-NOV-1999; 99US-00433360.
PR 12-MAY-2000; 2000US-00570593.
PR 25-JUL-2000; 2000US-00626301.
PR 21-FEB-2001; 2001US-0271254P.
PR 06-FEB-2003; 2003US-00081119.
PR 30-OCT-2003; 2003US-00698959.
PR 22-JAN-2004; 2004US-00763692.
XX
PA (CHIR ) CHIRON CORP.
XX
PI Reinhard C, Jefferson AB, Chan VW, Kaufmann J, Xin H, Kennedy GC;
PI Harrowe G, Khoja H, Shyamala V;
XX
DR WPI; 2005-457024/46.
XX
PT New isolated human HX2004-6 polypeptide or isolated VSHK-1 polypeptide,
PT useful for diagnosing or treating cancer, where VSHK-1 is also used to
PT identify a VSHK-1 receptor ligand.
XX
PS Example 25; Page 79; 206pp; English.
XX
CC The invention relates to human HX2004-6 protein and a seven transmembrane
CC receptor protein referred as VSHK-1 useful for diagnosing or treating
CC cancer. The invention also relates to a method for reducing the growth of
CC a cancerous cell. VSHK-1 is useful for identifying a VSHK-1 receptor
CC ligand and to identify a substance which modulates its signal
CC transduction activity. The HX2004-6 DNA is useful to detect the presence
CC of HX2004-6 in a biological sample (e.g. ductal epithelial cells from
CC tissue chosen from pancreas, colon and breast). The invention is useful
CC for screening drugs for the treatment of cancer. The present sequence is
CC a reverse transcriptase (RT)-PCR primer used in the expression analysis
CC of HX2004-6.
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1101
AEA89505/C
ID AEA89505 standard; DNA; 18 BP.
XX
AC AEA89505;
XX
DT 25-AUG-2005 (first entry)
XX
DE RT-PCR primer used in the expression analysis of HX2004-6.
XX
KW Drug screening; diagnosis; therapeutic; cancer; cytostatic; neoplasm; ss;
KW RT-PCR; reverse transcriptase PCR; primer.
XX
OS Unidentified.
XX
PN US2005130926-A1.
XX
PD 16-JUN-2005.
XX
PF 28-OCT-2004; 2004US-00977087.
XX
PR 04-NOV-1998; 98US-0107112P.
PR 06-JAN-1999; 99US-0114856P.
PR 14-MAY-1999; 99US-0134112P.
PR 26-JUL-1999; 99US-0145612P.
PR 13-AUG-1999; 99US-0148936P.
PR 03-NOV-1999; 99US-00433360.
PR 12-MAY-2000; 2000US-00570593.
PR 25-JUL-2000; 2000US-00626301.
PR 21-FEB-2001; 2001US-0271254P.
PR 06-FEB-2003; 2003US-00081119.
PR 30-OCT-2003; 2003US-00698959.
PR 22-JAN-2004; 2004US-00763692.
XX
PA (CHIR ) CHIRON CORP.
XX
PI Reinhard C, Jefferson AB, Chan VW, Kaufmann J, Xin H, Kennedy GC;
PI Harrowe G, Khoja H, Shyamala V;
XX
DR WPI; 2005-457024/46.
XX
PT New isolated human HX2004-6 polypeptide or isolated VSHK-1 polypeptide,
PT useful for diagnosing or treating cancer, where VSHK-1 is also used to
PT identify a VSHK-1 receptor ligand.
XX
PS Example 25; Page 79; 206pp; English.
XX
CC The invention relates to human HX2004-6 protein and a seven transmembrane
CC receptor protein referred as VSHK-1 useful for diagnosing or treating
CC cancer. The invention also relates to a method for reducing the growth of
CC a cancerous cell. VSHK-1 is useful for identifying a VSHK-1 receptor
CC ligand and to identify a substance which modulates its signal
CC transduction activity. The HX2004-6 DNA is useful to detect the presence
CC of HX2004-6 in a biological sample (e.g. ductal epithelial cells from
CC tissue chosen from pancreas, colon and breast). The invention is useful
CC for screening drugs for the treatment of cancer. The present sequence is
CC a reverse transcriptase (RT)-PCR primer used in the expression analysis
CC of HX2004-6.
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1102
AEB68153/C
ID AEB68153 standard; DNA; 18 BP.
XX
AC AEB68153;
XX
DT 22-SEP-2005 (first entry)
XX
DE Oligo used to identify rat P00188_D12 clone gene, SEQ ID NO: 10.
XX
KW Screening; diagnosis; therapeutic; inflammation; antiinflammatory;
KW cardiovascular disease; cardiovascular-gen.; renal disease; nephrotropic;
KW endocrine disease; genitourinary disease; secreted factor; ss.
XX
OS Rattus norvegicus.
XX
PN US2005158729-A1.
XX
PD 21-JUL-2005.
XX
PF 09-FEB-2004; 2004US-00775973.
XX
PR 20-SEP-2000; 2000US-00665976.
XX
PA (STAN/) STANTON L W.
PA (KAPO/) KAPOUN A M.
XX
PI Stanton LW, Kapoun AM;
XX
DR WPI; 2005-532124/54.
XX
PT Screening subject for cardiac, renal or inflammatory disease caused by
PT differential expression of polypeptide (new secreted factor) or its
PT endogenous homologue, by measuring and determining expression of
PT polypeptide or its homologue.
XX
PS Example 1; SEQ ID NO 10; 38pp; English.
XX
CC The invention relates to a method for screening subject for cardiac,
CC renal or inflammatory disease caused by differential expression of
CC polypeptide (new secreted factor) or its endogenous homologue, by
CC measuring and determining expression of polypeptide or its homologue. The
CC method is useful for screening, diagnosing and treating a subject for
CC cardiac, renal or inflammatory disease. The present sequence is an
CC oligonucleotide used to identify differentially expressed rat P00188_D12
CC clone secreted factor gene.
XX
SQ Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1103
AEB87723
ID AEB87723 standard; DNA; 18 BP.
XX
AC AEB87723;
XX
DT 06-OCT-2005 (first entry)
XX
DE Control sequence DNA probe.
XX
```

XX DNA detection; RNA detection; FRET; hybridization; probe; ss.

XX Synthetic.

XX Key Location/Qualifiers

XX modified_base 1

XX /*tag= a

XX /mod_base= OTHER

XX /note= "OTHER= 5' Cyanine 5 fluorophore"

XX WO2005071115-A1.

XX 04-AUG-2005.

XX 21-JAN-2005; 2005WO-US001771.

XX 21-JAN-2004; 2004US-0538381P.

XX 21-JAN-2004; 2004US-0538382P.

XX (GEOR-) GEORGIA TECH RES CORP.

XX Bao G, Nitin N;

XX WPI; 2005-564227/57.

XX New activable probe set comprising a donor polymer and an acceptor polymer, useful for in vivo gene detection or for detecting a target polynucleotide.

XX Example 4; SEQ ID NO 69; 147pp; English.

XX The present invention provides compositions and methods for the detection of a target polynucleotide. A claimed probe set comprises: (a) a donor polymer comprising (i) a first polynucleotide binding domain complementary to a first region of a target polynucleotide flanked by first and second stem regions which hybridize in the absence of the target polynucleotide to form a stem-loop or random-coil structure, and (ii) a quantum dot; and (b) an acceptor polymer comprising (i) a second polynucleotide binding domain complementary to a second region of the target nucleotide flanked by first and second stem regions which hybridize in the absence of the target polynucleotide to form a stem-loop or random-coil structure, and (ii) at least one reporter. Energy transfer occurs between the donor and the reporter(s) when the donor polymer and the acceptor polymer hybridize to the target polynucleotide and the quantum dot is exposed to an exciting amount of energy. The polymers may further comprise a protein transduction domain and/or targeting signal. Preferably, at least one polymer comprises a peptide nucleic acid, a plurality of quantum dots, a linkage that is resistant to enzymatic cleavage, and a quencher. Also claimed is a molecular beacon pair comprising a donor probe and acceptor probe. A claimed method of detecting a target polynucleotide comprises delivering at least one probe pair to cell lysates, tissue extracts or the interior of a cell, and exposing the quantum dot to an exciting amount of energy, where energy transfers between the quantum dot and the reporter to produce a detectable signal when the donor probe and acceptor probe hybridize to the target polynucleotide. The detectable signal is indicative of a point mutation, deletion or insertion in the target polynucleotide, or of a pathology or predisposition to a pathology. The target polynucleotide is especially K-ras, survivin, p53, p16, DPC4 or BRCA4. Also claimed are: a method for sorting cells expressing a target nucleic acid; a method for identifying modulators of gene expression; a method for determining effectiveness of an agent on a host; a method for delivering a probe to the interior of a cell; and a method for detecting the transport and localization of a nucleic acid-protein complex in living cells. The present sequence is that of a fluorescently labeled probe, which was used as a control in a fluorescence in situ hybridization (FISH) assay in an example from the invention describing mRNA detection in living cells using dual FRET molecular beacons.

XX Sequence 18 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 18; DB 1; Length 18;

XX Best Local Similarity 100.0%; Pred. No. 8.7e+02;

Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726

DB 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1104

AED75673/c

ID AED75673 standard; DNA; 18 BP.

XX

XX AED75673;

XX 12-JAN-2006 (first entry)

XX Immunostimulatory oligonucleotide, SEQ ID 882.

XX

XX Immunostimulant; Antiinflammatory; Antipsoriatic; Gastrointestinal-Gen.;

XX Antiulcer; Dermatological; Antiallergic; helper T-lymphocyte;

XX immune stimulation; inflammation; psoriasis; inflammatory bowel disease;

XX Crohn's disease; ulcerative colitis; eczema; skin allergy;

XX contact dermatitis; ss; phosphorothioate.

XX Synthetic.

XX

XX Key Location/Qualifiers

XX modified_base 1..18

XX /*tag= a

XX /mod_base= OTHER

XX /note= "Phosphorothioate backbone"

XX US2005250726-A1.

XX 10-NOV-2005.

XX 12-MAY-2005; 2005US-00127654.

XX 29-MAR-2001; 2001US-0279642P.

XX 29-MAR-2002; 2002US-00112653.

XX (IOWA) UNIV IOWA RES FOUND.

XX Krieg AM, Berg DJ;

XX WPI; 2005-768014/78.

XX

XX Use of an immunostimulatory nucleic acid and a cyclooxygenase inhibitor to augment T-helper1 cells like immune activation and to treat non-

XX allergic inflammatory diseases, e.g. psoriasis and Crohn's disease.

XX Disclosure; SEQ ID NO 882; 58pp; English.

XX

XX The present invention relates to a method for augmenting T-helper 1 cells (Th1)-like immune activation in a subject. The method comprises

XX administering an immunostimulatory nucleic acid (i) to induce Th1-like

XX immune activation; and administering a cyclooxygenase inhibitor (ii) to

XX inhibit prostaglandin expression, is new. The present sequence is one

XX such immunostimulatory nucleic acid. (i) is useful for treating non-

XX allergic inflammatory diseases such as psoriasis, inflammatory bowel

XX diseases (Crohn's disease and ulcerative colitis), eczema, allergic

XX contact dermatitis or latex dermatitis.

XX

XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

XX

XX Query Match 0.7%; Score 18; DB 1; Length 18;

XX Best Local Similarity 100.0%; Pred. No. 8.7e+02;

XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726

DB 18 AAAAAAAAAAAAAAAAAA 1

```

RESULT 1105
AED67970/c
ID AED67970 standard; DNA; 18 BP.
XX AC
XX AED67970;
XX DT
XX 12-JAN-2006 (first entry)
XX DE
XX T20 diluent SEQ ID: 26 #2 used to prepare aptamer-coated gold probes.
XX KW
XX Analyte detection; DNA detection; protein detection; ss.
XX OS
XX Synthetic.
XX FH
XX Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= Linked to a steroid"
XX PN
XX US2005250094-A1.
XX PD
XX 10-NOV-2005.
XX PF
XX 22-NOV-2004; 2004US-00995051.
XX PR
XX 30-MAY-2003; 2003US-0474569P.
XX PR 29-AUG-2003; 2003US-0499034P.
XX PR 04-NOV-2003; 2003US-0517450P.
XX PR 03-MAY-2004; 2004US-0567874P.
XX PR 27-MAY-2004; 2004US-00854848.
XX PA
XX (NANO-) NANOSPHERE INC.
XX PI
XX Storhoff JJ, Lucas A, Muller UR, Bao YP, Senical M, Garimella V;
XX WI; 2005-784662/80.
XX DT
XX Detecting target (e.g. nucleic acid, protein, lipid, bacterium) in
XX sample, comprises contacting sample with one or more types of
XX nanoparticle having target binding complements, and detecting any light
XX scattering complex formed.
XX PS
XX Example 17; SEQ ID NO 26; 70pp; English.
XX CC
XX The present invention provides a method for detecting the presence or
XX absence of a single target molecule or target analyte (e.g. nucleic acid,
XX protein, lipid, bacterium). The method involves contacting sample with
XX one or more types of nanoparticle having target binding complements and
XX detecting any light scattering complex formed. The nanoparticle probe
XX complexes comprise two or more probes bound to a specific target analyte.
XX The present sequence is a T20 diluent which is used in the preparation of
XX aptamer-coated gold probes. Note: The present sequence is the SEQ ID NO:
XX 26 shown on page 21 in example 17 of the specification. This sequence
XX differs from the SEQ ID NO: 26 given in the sequence listing as well as
XX in page 25 of the specification (see AED67955).
XX SQ
XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1106
AEF26309/c
ID AEF26309 standard; DNA; 18 BP.
XX AC
XX AEF26309;

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```

XX 09-MAR-2006 (first entry)
XX DT
XX DE
XX Early tumor detection method associated RT-PCR primer, SEQ ID No:7.
XX KW
XX diagnosis; tumor; neoplasm; cytostatic; prognosis; expression;
XX DNA amplification; survivin; reverse transcriptase-PCR; RT-PCR; primer;
XX ss.
XX OS
XX Unidentified.
XX PN
XX CN1629311-A.
XX PD
XX 22-JUN-2005.
XX PF
XX 19-DEC-2003; 2003CN-01104060.
XX PR
XX 19-DEC-2003; 2003CN-01104060.
XX PA
XX (YESS/) YE S.
XX PI
XX Ye S, Luo B;
XX WI; 2005-705360/73.
XX DT
XX Detecting survivin expression in tested specimen, useful in detecting
XX early stage of tumor comprises the use of PCR.
XX PS
XX Claim 8; SEQ ID NO 7; 22pp; Chinese.
XX CC
XX The invention relates to a diagnosis reagent and method for detecting the
XX early phase of tumors, prognosis and monitoring by using peripheral
XX blood, body fluid or tissue as specimen. The method involves measuring
XX the survivin transcription level, using the expression amount of survivin
XX as the standard. The reagent comprises the following components, survivin
XX nucleic acid fragment coated on the carrier, preparing RNA and cDNA from
XX the specimen, PCR amplification of the survivin from prepared cDNA. This
XX sequence represents a reverse transcriptase (RT)-PCR primer used in the
XX method of the invention.
XX SQ
XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1107
AEF31353/c
ID AEF31353 standard; DNA; 18 BP.
XX AC
XX AEF31353;
XX DT
XX 23-MAR-2006 (first entry)
XX DE
XX Cotton ARF1 PCR primer #11.
XX KW
XX ARF1; gene expression; ss; PCR; primer.
XX OS
XX Gossypium hirsutum.
XX PN
XX CN1621523-A.
XX PD
XX 01-JUN-2005.
XX PF
XX 26-NOV-2003; 2003CN-01113797.
XX PR
XX 26-NOV-2003; 2003CN-01113797.
XX

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PA (BIOT-) BIOTECHNOLOGY RES INST CMAS.
 XX Guo S, Ren M, Zhang R;
 XX WPI; 2005-659717/68.
 DR Adenosine phosphate-ribosylation-factor 1 gene in cotton and its
 PT promoter.
 XX
 XX Example 1; Page 4; 13pp; Chinese.
 XX
 CC The invention relates to one kind of ARF1 gene in cotton genome and its
 CC promoter sequence. The gene and the promoter may be preponderantly
 CC expressed in the bud, flower, fiber and boll shell. The gene and the
 CC promoter may be useful in the research of the development of cotton
 CC reproductive organ, the quality improvement and the specific expression
 CC of foreign gene in cotton reproductive organ. The present sequence
 CC represents a cotton ARF1 related PCR primer.
 XX
 XX Sequence 18 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2726
 Db 18 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1108
 AAQ7552/c
 ID AAQ7552 standard; DNA; 19 BP.
 XX
 AC AAQ7552;
 XX
 DT 04-AUG-1995 (first entry)
 XX
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 PN JP06303997-A.
 XX
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 DR WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 PS Disclosure; Page 5; 11pp; Japanese.
 XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 19 BP; 2 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 AAAAAAAAAAAAAAAAAAAAAA 2725
 Db 18 AAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1110
 AAQ7554/c
 ID AAQ7554 standard; DNA; 19 BP.
 XX
 AC AAQ7554;
 XX
 DT 04-AUG-1995 (first entry)
 XX
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 PN JP06303997-A.
 XX
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 DR WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 PS Disclosure; Page 5; 11pp; Japanese.
 XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 19 BP; 2 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 18; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
 Db 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1109
 AAQ7553/c
 ID AAQ7553 standard; DNA; 19 BP.
 XX
 AC AAQ7553;
 XX
 DT 04-AUG-1995 (first entry)
 XX
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 PN JP06303997-A.
 XX
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 DR WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 PS Disclosure; Page 5; 11pp; Japanese.
 XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 19 BP; 1 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 18; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
 Db 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1110
 AAQ7554/c
 ID AAQ7554 standard; DNA; 19 BP.
 XX
 AC AAQ7554;
 XX
 DT 04-AUG-1995 (first entry)
 XX
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 PN JP06303997-A.
 XX
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 DR WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 PS Disclosure; Page 5; 11pp; Japanese.
 XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 XX Sequence 19 BP; 1 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
 SQ

```

XX OS Synthetic.
XX PN JP06303997-A.
XX XX
XX PD 01-NOV-1994.
XX XX
XX PF 16-APR-1993; 93JP-00112515.
XX XX
XX PR 16-APR-1993; 93JP-00112515.
XX XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XX
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX XX
XX PS Disclosure; Page 5; 11pp; Japanese.
XX XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX XX
XX SQ Sequence 19 BP; 1 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA AAAAAAAAAA 2725
Db 18 TAAAAA AAAAAAAAAA 1

RESULT 1111
ABL51521
ID ABL51521 standard; DNA; 19 BP.
XX
XX AC ABL51521;
XX XX
XX DT 01-JUL-2002 (first entry)
XX XX
XX DE Tailing reaction related exemplary primer dA18U SEQ ID NO:2.
XX XX
XX KW Tailing reaction; tailed primer; primer; probe; identification;
XX KW detection; linear amplification scheme; chain extending enzyme;
XX KW telomerase; ss.
XX XX
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
XX FT misc_RNA 19
XX FT /*tag= a
XX FT
XX FT US2002031776-A1.
XX PN
XX PD 14-MAR-2002.
XX XX
XX PF 26-JUL-2001; 2001US-00917138.
XX XX
XX PR 28-MAY-1999; 99US-0136545P.
XX PR 25-MAY-2000; 2000US-00580358.
XX XX
XX PA (TULL/) TULLIS R H.
XX PA (STRE/) STREIFEL J A.
XX XX
XX PI Tullis RH, Streifel JA;

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XX WPI; 2002-361176/39.
XX
XX DR Identifying and detecting nucleic acids, particularly DNA hybridization
XX XX probes, involves employing chain extending enzymes (e.g. telomerase) to
XX PT elongate probes to render them readily detectable.
XX PT
XX PS Example 1; Page 5; 10pp; English.
XX XX
XX CC The present invention describes a method for detecting a nucleic acid
XX CC probe, which comprises using chain extending enzymes to elongate probes.
XX CC The method comprises: (a) treating the sample with a chain terminating
XX CC reagent to prevent polynucleotide chain growth from the nucleic acid in
XX CC the sample; (b) contacting the sample with the probe containing a
XX CC terminus capable of elongation by a chain extending enzyme, where the
XX CC probe hybridises to the nucleic acid in the sample; (c) contacting the
XX CC sample with a chain extending enzyme and its substrates, which elongates
XX CC the probe; and (d) detecting the elongated hybridised probe. Also
XX CC described is a method comprising: (a) treating nucleic acid molecules or
XX CC modified nucleic acids in a sample with a reagent or reagents that render
XX CC the nucleic acid chains unextendable by a non-template-dependent enzyme;
XX CC (b) hybridising the treated molecules with a nucleic acid probe that
XX CC includes an extendable terminus, under conditions where hybrids form; and
XX CC (c) treating any hybrids formed with a non-template dependent chain
XX CC elongating enzyme and its substrates, where any hybridised probe is
XX CC extended. The method is useful for identifying and detecting nucleic
XX CC acids, particularly DNA hybridisation probes. The present sequence
XX CC represents a tailing reaction exemplary primer, which is used in an
XX CC example from the present invention
XX XX
XX SQ Sequence 19 BP; 18 A; 0 C; 0 G; 0 T; 1 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAA AAAAAAAAAA 2726
Db 1 AAAAAA AAAAAAAAAA 18

RESULT 1112
ABZ75398/c
ID ABZ75398 standard; DNA; 19 BP.
XX
XX AC ABZ75398;
XX XX
XX DT 07-MAY-2003 (first entry)
XX XX
XX DE Synthetic nuclease-resistant oligomeric compound #54.
XX XX
XX KW Nuclease resistant; ds; pharmaceutical; topical administration;
XX KW transdermal patch; enzymatic degradation resistant.
XX XX
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
XX FT modified_base 19
XX FT /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "phenoxazine"
XX PN
XX PD WO2003004602-A2.
XX XX
XX PF 16-JAN-2003.
XX XX
XX PR 01-JUL-2002; 2002WO-US020934.
XX XX
XX PR 03-JUL-2001; 2001US-0102682P.
XX PR 28-NOV-2001; 2001US-00996292.
XX PR 10-DEC-2001; 2001US-00013295.
XX XX
XX PA (ISIS-) ISIS PHARM INC.

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XX PI Manoharan M, Maier MA, Prakash TP, Rajeev KG;
XX DR WPI; 2003-256318/25.
XX PT Nuclease-resistant oligomeric compound useful as pharmaceuticals for
XX PT topical administration such as transdermal patches.
XX PS Disclosure; Page 234; 234pp; English.
XX CC The invention relates to novel nuclease-resistant oligomeric compounds.
XX CC The compounds of the invention are useful as pharmaceuticals for topical
XX CC administration such as transdermal patches. The oligomeric compound is
XX CC resistant to enzymatic degradation. The sequences shown in ABZ75345-
XX CC ABZ75399 represent the nuclease-resistant compounds of the invention
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

  Query Match      0.7%; Score 18; DB 1; Length 19;
  Best Local Similarity 100.0%; Pred. No. 8.9e+02;
  Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1113
ABZ75399/c
ID ABZ75399 standard; DNA; 19 BP.
XX AC
XX AC
XX DT 11-MAR-2003 (first entry)
XX DE Oligo dT primer to amplify cytochrome P450 gene fragments.
XX KW cytochrome P450 gene; tobacco; phenotype; transgenic plant; nornicotine;
XX KW primer; ss.
XX OS Nicotiana sp.
XX PN WO2003078577-A2.
XX PD 25-SEP-2003.
XX PF 12-MAR-2003; 2003WO-US007430.
XX PR 12-MAR-2002; 2002US-0363684P.
XX PA (USSM-) US SMOKELESS TOBACCO CO.
XX PI Xu D;
XX DR WPI; 2003-902814/82.
XX PT New isolated nucleic acid molecule comprising a fragment of cytochrome
XX PT P450, useful for altering plant phenotypes, and for producing transgenic
XX PT plants containing high nornicotine levels.
XX PS Disclosure; SEQ ID NO 154; 81pp; English.
XX CC The invention relates to the isolation of nucleic acid molecules
XX CC comprising fragments of a cytochrome P450 gene from Nicotiana plants or
XX CC molecule that have at least 75, 91 or 99% identity to the sequences. The
XX CC nucleic acid molecules are useful for altering plant phenotypes, and for
XX CC producing transgenic plants containing high nornicotine levels. This
XX CC sequence represents a PCR primer used to isolate the fragments of the
XX CC genes of the invention.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;

  Query Match      0.7%; Score 18; DB 1; Length 19;
  Best Local Similarity 100.0%; Pred. No. 8.9e+02;
  Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1115
ADG28486/c
ID ADG28486 standard; DNA; 19 BP.
XX AC
XX AC
XX ADG28486;
XX XX

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DT XX 26-FEB-2004 (first entry)
DE XX Modified oligonucleotide seq id 7.
KW antibacterial; protozoacide; antialgal; fungicide;
KW internucleotide linkage; 2',5'-internucleotide linkage; 3'-substituent;
KW antisense; pharmaceutical; RNA-DNA transcription;
KW RNA-protein translation; infection; diagnostic; therapeutic;
KW nuclease resistance; ss.
XX OS Synthetic.
XX OS US6653458-B1.
XX PN 25-NOV-2003.
XX PD 08-NOV-1999; 99US-00435806.
XX PF 03-SEP-1993; 93US-00117363.
XX PR 02-SEP-1994; 94WO-US01031.
XX PR 28-FEB-1996; 96US-00602862.
XX PR 14-JUL-1998; 98US-00115043.
XX XX (ISIS-) ISIS PHARM INC.
XX PI Manoharan M, Cook PD, Guinasso CJ;
XX WPI; 2004-079586/08.
XX New oligonucleotide comprising at least one 2',5'-internucleotide linkage
PT useful for treating organisms having disease caused by undesired
PT production of protein e.g. bacteria, yeast, protozoa and algae.
XX Example 54; SEQ ID NO 7; 30pp; English.
XX The invention describes an oligonucleotide comprising several nucleotides
CC covalently linked together by internucleotide linkages. At least one of
CC the nucleotides is linked to an adjacent nucleotide by 2',5'-
CC internucleotide linkage and bears a 3'-substituent. The oligonucleotides
CC are useful as antisense oligonucleotides; in pharmaceutical compositions
CC ; for treating organisms having disease caused by undesired production of
CC protein e.g. organism that utilises RNA-DNA transcription or RNA-protein
CC translation, bacteria, yeast, protozoa, algae and warm-blooded animals;
CC for developing diagnostic and therapeutic agents. The modified
CC oligonucleotide exhibits improved properties of nuclease resistance and
CC binding affinity. The oligonucleotides are easy to synthesise and exhibit
CC good properties of nuclease resistance and hybridisation to target
CC nucleic acids. The oligonucleotide is potent antisense agent with longer
CC duration of action. This sequence represents an oligonucleotide of the
CC invention.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1116
AD059144/c
ID AD059144 standard; DNA; 19 BP.
XX AC AD059144;
XX 09-SEP-2004 (first entry)
XX Tobacco cytochrome P450 PCR primer #14.
DE ss; primer; PCR; cytochrome P450; transgenic; tobacco; plant.
XX
XX Nicotiana sp.
XX US2004117869-A1.
XX 17-JUN-2004.
XX 12-MAR-2003; 2003US-00387346.
XX 11-JAN-2002; 2002US-0347444P.
XX 12-MAR-2002; 2002US-0363684P.
XX 10-JAN-2003; 2003US-00340861.
XX (USSM-) US SMOKELESS TOBACCO CO.
XX Xu D;
XX WPI; 2004-449487/42.
XX An isolated nucleic acid molecule, comprising nucleic acid sequence of
PT Nicotiana derived cytochrome P450 enzyme fragments, useful for producing
PT transgenic plants.
XX Disclosure; Fig 73; 82pp; English.
XX The invention relates to an isolated nucleic acid molecule (I),
CC comprising a nucleic acid sequence chosen from 75 Nicotiana-derived
CC cytochrome P450 enzyme fragment sequences. (I) is useful for producing a
CC transgenic tobacco plant, which involves operably linking (I) with a
CC promoter functional in the plant to create a plant transformation vector,
CC and transforming the plant with the plant transformation vector,
CC selecting a plant cell transformed with the transformation vector, and
CC regenerating a plant from the selected plant cell. The nucleic acid
CC molecule is in an antisense orientation, sense orientation or is in a RNA
CC interference orientation. The present sequence represents a PCR primer
CC used to clone DNA encoding tobacco cytochrome P450 enzyme fragments of
CC the invention.
XX SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1
RESULT 1117
ADT55005
ID ADT55005 standard; DNA; 19 BP.
XX AC ADT55005;
XX 30-DEC-2004 (first entry)
XX Amplified RNA (arNA) preparation method-related DNA sequence #1.
XX amplified RNA preparation; nervous system disorder;
KW neurodegenerative disease; Parkinson's disease; Alzheimer's disease;
KW multiple sclerosis; psychiatric disorder; schizophrenia;
KW affective disorder; manic depression; lack of appetite control;
KW attention deficit disorder; cancer cell detection; ds.
XX OS Synthetic.
XX Key Location/Qualifiers
FH misc_difference 1 /tag= a
FT /note= "N represents a T7 RNA polymerase promoter
FT sequence"
XX

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PN WO2004085681-A2.
XX
PD 07-OCT-2004.
XX
XX 19-MAR-2004; 2004WO-US008553.
XX
XX 21-MAR-2003; 2003US-0456825P.
PR
XX (ARCT-) ARTURUS BIOSCIENCE INC.
XX
XX Erlander MG, Salunga RC, Ma X, Enright E;
XX
XX WPI; 2004-710328/69.
XX
XX Preparing amplified RNA (aRNA) sequences present in single stranded or
PT made single stranded target polynucleotide(s), useful for detecting
PT cancer cells, comprises transcribing double stranded cDNA templates with
PT an RNA polymerase.
XX
XX Example 1; Fig 1; 46pp; English.
XX
XX The invention comprises a method of preparing amplified RNA (aRNA)
CC sequences present in one or more target polynucleotide that is single
CC stranded or made single stranded. The method involves forming double
CC stranded cDNA templates containing sequences present in the target
CC polynucleotide and transcribing the cDNA templates with an RNA polymerase
CC capable of initiating transcription via the promoter region to produce
CC amplified RNA containing sequences of the target polynucleotide. The
CC method of the invention is useful for amplifying the population of RNAs
CC extracted from formalin-fixed tissues and/or the population of mRNA
CC splice variants. The method is also useful for determining gene
CC expression in neuronal and non-neuronal cells involved in disorders of
CC the nervous system, such as: neurodegenerative diseases (e.g. Parkinson's
CC disease, Alzheimer's disease, and multiple sclerosis); psychiatric
CC disorders (e.g. schizophrenia); and affective disorders (e.g. manic
CC depression, lack of appetite control, and attention deficit disorder).
CC The method of the invention may also be used to detect cancer cells, and
CC to facilitate diagnosis/prognosis of cancer in a patient. The present DNA
CC sequence is shown in a figure exemplifying the method of the invention.
XX
XX Sequence 19 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 1 Other;
SQ
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db |||||
2 AAAAAAAAAAAAAAAAAA 19

RESULT 1118
ADY58870
ID ADY58870 standard; DNA; 19 BP.
XX
XX ADY58870;
AC
XX 19-MAY-2005 (first entry)
DT
XX Polya probe.
DE
XX Molecular beacon; DNA detection; RNA detection; probe; ss.
KW
XX Synthetic.
XX
XX WO2005021712-A2.
PN
XX 10-MAR-2005.
PD
XX
XX 25-JUN-2004; 2004WO-US020232.
XX
XX 25-JUN-2003; 2003US-0482648P.
PR
XX 23-JUN-2004; 2004US-00874920.
PR

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XX (GEOR-) GEORGIA TECH RES CORP.
XX
XX Bao G, Nitin N, Nie S, Kim GJ;
XX
XX WPI; 2005-223176/23.
XX
XX New molecular beacon operably linked to a protein transduction domain,
PT useful in preparing a pharmaceutical composition for treating e.g.,
PT cancer.
XX
XX Example 9; SEQ ID NO 22; 91pp; English.
XX
XX The invention provides nucleic acid reporters and methods of their use.
CC The nucleic acid reporters include molecular beacons modified with
CC protein transduction domains (PTDs) to facilitate translocation of the
CC nucleic acid reporter across cellular membranes. The nucleic acid
CC reporters are also optionally modified with a targeting signal to direct
CC the nucleic acid reporter to a specific cell, tissue, organ,
CC intracellular region, organelle or vesicle. The molecular beacon can be
CC used in methods for: detecting or sorting cells expressing a target
CC nucleic acid; detecting a target nucleic acid in a host; detecting the
CC expression of a target nucleic acid in a living cell; identifying
CC modulators of gene expression; determining the effectiveness of an agent
CC on a host cell; and detecting the transport and localization of a nucleic
CC acid-protein complex in living cells. The present sequence is of a polya
CC probe. This was used as a negative control in a fluorescence in situ
CC hybridization (FISH) assay targeting GAPDH mRNA in a comparison of this
CC traditional method of detection with the method of the invention.
XX
XX Sequence 19 BP; 18 A; 0 C; 0 G; 0 T; 0 U; 1 Other;
SQ
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db |||||
2 AAAAAAAAAAAAAAAAAA 19

RESULT 1119
ADZ65660/c
ID ADZ65660 standard; DNA; 19 BP.
XX
XX ADZ65660;
AC
XX 14-JUL-2005 (first entry)
DT
XX Oilgo d(T) PCR primer for amplifying p450 cDNA.
DE
XX Cytochrome p450; ss; secondary metabolite; ethylene; senescence;
KW normicotine; transgenic plant; primer.
XX
XX Synthetic.
XX
XX WO2005038033-A2.
PN
XX 28-APR-2005.
PD
XX
XX 15-OCT-2004; 2004WO-US034065.
XX
XX 16-OCT-2003; 2003US-00686947.
PR
XX 29-APR-2004; 2004US-056235P.
PR
XX 03-SEP-2004; 2004US-00934944.
XX
XX (USSM-) US SMOKELESS TOBACCO CO.
XX
XX Xu D;
XX
XX WPI; 2005-315717/32.
XX
XX New nucleic acid molecule encoding cytochrome P450 enzymes in Nicotiana,
PT

```

PT useful in developing tobacco plants with altered phenotypes.
 PS Disclosure; Fig 152; 226pp; English.
 CC The invention relates to an isolated nucleic acid molecule (I) from
 CC Nicotiana, where the nucleic acid molecule comprising any of the 59
 CC nucleic acid sequences of SEQ ID NOS: 299-357 (NOTE: The claims refer to
 CC SEQ ID NOS 299-357 as nucleic acids but these sequences (apart from SEQ
 CC ID NO 356) are all proteins and appear as ADZ65402-ADZ65460. The nucleic
 CC acids of the invention encode cytochrome P450 enzymes whose expression is
 CC induced by ethylene and/or plant senescence. Also included are a
 CC transgenic plant comprising (I), a method of producing a transgenic
 CC plant, a method of selecting a plant containing a nucleic acid molecule
 CC (where the plant is analyzed for the presence of nucleic acid sequence of
 CC ADZ65402-
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 Query Match 0.7%; Score 18; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 Db 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1120
 ADZ66018/c
 ID ADZ66018 standard; DNA; 19 BP.
 XX
 AC ADZ66018;
 XX
 DT 14-JUL-2005 (first entry)
 XX
 DE Tobacco cytochrome P450 enzyme cDNA PCR primer #6.
 XX
 KW Enzyme engineering; cytochrome P450; PCR; ss; primer.
 XX
 OS Nicotiana tabacum.
 OS Synthetic.
 XX
 PN W02005038018-A2.
 XX
 PD 28-APR-2005.
 XX
 PF 15-OCT-2004; 2004WO-US034218.
 XX
 PR 16-OCT-2003; 2003US-00686947.
 XX
 PR 29-APR-2004; 2004US-0366235P.
 PR 17-SEP-2004; 2004US-00943507.
 XX
 PA (USSM-) US SMOKELESS TOBACCO CO.
 XX
 PI Xu D;
 XX
 WPI; 2005-315709/32.
 XX
 PT New isolated nucleic acid molecule from Nicotiana, useful for altering
 PT plant phenotypes, thus producing a transgenic plant having reduced levels
 PT of nornicotine.
 XX
 PS Disclosure; Fig 153; 203pp; English.
 CC The invention relates to an isolated nucleic acid molecule from
 CC Nicotiana, encoding a protein. The invention also relates to a transgenic
 CC plant comprising the nucleic acid molecule, a method of producing a
 CC transgenic plant comprising operably linking the nucleic acid molecule
 CC with a promoter functional in the plant to create a plant
 CC transformational vector, transforming the plant with the plant
 CC transformational vector, selecting a plant cell transformed with the
 CC transformational vector and regenerating a transformation plant from the
 CC transformed plant cell, a method of selecting a plant containing a

CC nucleic acid molecule, a method of increasing or decreasing nornicotine
 CC levels in a plant by operably linking the nucleic acid molecule with a
 CC promoter functional in the plant, a tobacco product having reduced
 CC amounts of nornicotine levels, the tobacco product comprising tobacco
 CC from the plant, a tobacco leaf having reduced amounts of nornicotine
 CC levels and a method of isolating a gene from a plant using the isolated
 CC nucleic acid. In producing a transgenic plant, the plant has reduced
 CC levels of nornicotine. The tobacco product is selected from cigarettes,
 CC cigars, pipe tobacco, snuff, chewing tobacco, products blended with the
 CC tobacco product and their mixtures. The nucleic acid molecule is useful
 CC for altering plant phenotypes, thus producing a transgenic plant having
 CC reduced levels of nornicotine. This sequence represents a PCR primer used
 CC to amplify cDNA encoding a tobacco cytochrome P450 enzyme of the
 CC invention.
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
 Query Match 0.7%; Score 18; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 Db 18 AAAAAAAAAAAAAAAAAA 1
 RESULT 1121
 AED19814/c
 ID AED19814 standard; DNA; 19 BP.
 XX
 AC AED19814;
 XX
 DT 01-DEC-2005 (first entry)
 XX
 DE Oligonucleotide used for modulating gene transcription.
 XX
 KW Transcription; ss.
 XX
 OS Unidentified.
 XX
 PN US2005223422-A1.
 XX
 PD 06-OCT-2005.
 XX
 PF 23-SEP-2004; 2004US-00950321.
 XX
 PR 23-SEP-2003; 2003US-0505689P.
 PR 14-OCT-2003; 2003US-0511460P.
 PR 06-NOV-2003; 2003US-0518075P.
 PR 04-DEC-2003; 2003US-0527611P.
 PR 12-DEC-2003; 2003US-0529352P.
 PR 13-FEB-2004; 2004US-0544771P.
 PR 30-JUN-2004; 2004US-0583691P.
 XX
 PA (CERE-) CERES INC.
 XX
 PI Cook Z, Fang Y, Feldmann K, Kiegle EA, Kwok S, Lu Y, Medrano L;
 PI Pennell R, Schneeberger R, Wu C;
 XX
 WPI; 2005-664198/68.
 XX
 PT New isolated nucleic acid molecule capable of modulating transcription,
 PT or its complement, useful for transcription of polynucleotides in a host
 PT cell or transformed host organism.
 XX
 PS Disclosure; SEQ ID NO 2; 210pp; English.
 CC The invention relates to a nucleic acid molecule or its complement
 CC sequence capable of modulating transcription. The nucleic acid molecule
 CC of the invention is useful for transcription of polynucleotides in a host
 CC cell or transformed host organism. The present sequence is an
 CC oligonucleotide used for modulating gene transcription.
 XX

```
SQ Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1122
AED21473/C
ID AED21473 standard; DNA; 19 BP.
AC AED21473;
XX
XX
XX
DT 01-DEC-2005 (first entry)
XX
DE Primer dTV, SEQ ID NO: 74, used to generate probes for hybridization.
XX
XX Transgenic plant; plant growth regulation; development; food;
KW agriculture; horticulture; primer; ss.
XX
XX Unidentified.
XX
XX US2005223434-A1.
PN
XX
XX 06-OCT-2005.
PD
XX
XX 23-SEP-2004; 2004US-00950095.
PF
XX
XX 23-SEP-2003; 2003US-0505420P.
PR
XX
XX (CERE-) CERES INC.
PA
XX
XX Alexandrov N, Zhihong C, Fang Y, Feldmann K, Kiegle EA, Kwok S;
PI Lu Y, Penell R, Schneeberger R, Wu C;
PI
XX
XX WPI; 2005-683371/70.
DR
XX
XX New nucleotide sequences, useful modifying plant characteristics or for
PT modulating and manipulating growth, development, and biochemistry of a
PT plant.
PT
XX
XX Disclosure; SEQ ID NO 74; 132pp; English.
PS
XX
XX The present invention relates to polynucleotides and their encoding
CC polypeptides with the use of those products for making transgenic plants.
CC The sequences of the invention are useful modifying plant characteristics
CC or for modulating and manipulating growth, development and biochemistry
CC of a plant. The invention is useful for producing plants with increased
CC yield of biomass or chemical components, in particular food and
CC reproducible raw materials. The present sequence is a d(T)18 primer used
CC to generate probes for hybridization. This sequence is used in making
CC transgenic plants.
CC
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
SQ
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1123
AED60796/C
ID AED60796 standard; DNA; 19 BP.
XX
XX
XX AED60796;
AC
```

```
XX
DT 29-DEC-2005 (first entry)
XX
XX Synthetic primer #2.
DE
XX
XX Transcription; vector; primer; ss.
XX
XX Synthetic.
OS
XX
XX US2005246785-A1.
PN
XX
XX 03-NOV-2005.
PD
XX
XX 30-SEP-2004; 2004US-00957569.
PF
XX
XX 14-OCT-2003; 2003US-0511460P.
PR
XX
XX 06-NOV-2003; 2003US-0518075P.
PR
XX
XX 04-DEC-2003; 2003US-0527611P.
PR
XX
XX 13-FEB-2004; 2004US-0544771P.
PR
XX
XX (CERE-) CERES INC.
PA
XX
XX Cook Z, Fang Y, Feldmann K, Kiegle EA, Kwok S, Lu Y, Medrano L;
PI Pennell R, Schneeberger R, Wu C;
PI
XX
XX WPI; 2005-733852/75.
DR
XX
XX New isolated promoter sequences and promoter control elements, useful for
PT modulating transcription of a desired polynucleotide in plants.
PT
XX
XX Disclosure; SEQ ID NO 2; 787pp; English.
PS
XX
XX The invention relates to an isolated nucleic acid molecule capable of
CC modulating transcription, where the nucleic acid molecule shows at least
CC 80% sequence identity to one of the promoter sequences given in the
CC specification or its complement. The invention also relates to a vector
CC construct comprising a first nucleic acid capable of modulating
CC transcription, where the nucleic acid molecule shows at least 80%
CC sequence identity to one of the promoter sequences given in the
CC specification, and a second nucleic acid having to be transcribed, where
CC the first and second nucleic acid molecules are heterogeneous to each
CC other and are operably linked together, a host cell comprising the
CC nucleic acid, where the nucleic acid molecule is flanked by an exogenous
CC sequence or comprising the vector construct, a method of modulating
CC transcription and a plant comprising the vector construct. The first
CC nucleic acid molecule is capable of modulating transcription during the
CC developmental times, in response to a stimulus or in a cell tissue or
CC organ as given in the specification, where the first nucleic acid
CC molecule is inserted into a plant cell and the plant cell is regenerated
CC into a plant. The nucleic acid molecules, which are promoter sequences,
CC and promoter control elements are useful for modulating transcription of
CC a desired polynucleotide in plants. This sequence represents a synthetic
CC primer used in the scope of the invention.
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 18 T; 0 U; 1 Other;
SQ
Query Match 0.7%; Score 18; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1124
AEE0814/C
ID AEE0814 standard; DNA; 19 BP.
XX
XX
XX AEE0814;
AC
XX
XX 26-JAN-2006 (first entry)
DT
XX
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PS Disclosure; Page 5; 1lpp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 2 C; 0 G; 17 T; 0 U; 0 Other;

  Query Match      0.7%; Score 18; DB 1; Length 20;
  Best Local Similarity 100.0%; Pred. No. 9.1e+02;
  Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1131
AAQ75582/c
ID AAQ75582 standard; DNA; 20 BP.
XX
AC AAQ75582;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 1lpp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 3 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

  Query Match      0.7%; Score 18; DB 1; Length 20;
  Best Local Similarity 100.0%; Pred. No. 9.1e+02;
  Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1133
AAQ75587/c
ID AAQ75587 standard; DNA; 20 BP.
XX
AC AAQ75587;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.

```


XX PR 16-APR-1993; 93JP-00112515.
 XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX DR WPI; 1995-018287/03.
 XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX PS Disclosure; Page 5; 11pp; Japanese.
 XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 9.1e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
 Db 18 TAAAAAAAAAAAAAAAAAAAAA 1
 RESULT 1134
 ABZ88694
 ID ABZ88694 standard; DNA; 20 BP.
 AC ABZ88694;
 XX 17-OCT-2003 (first entry)
 DT Human oligonucleotide sequence.
 DE
 DE Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX OS Homo sapiens.
 OS WO200285308-A2.
 PN 31-OCT-2002.
 PD 23-APR-2002; 2002WO-US013135.
 PF 24-APR-2001; 2001US-0286137P.
 PR (EPIG-) EPIGENESIS PHARM INC.
 PA Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 DR Pharmaceutical composition for treating ailments associated with impaired
 XX PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiqunone.
 XX PS Disclosure; SEQ ID NO 3936; 872pp; English.

CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiqunone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiqunone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 20 BP; 17 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 0.7%; Score 18; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 9.1e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
 Db 3 TAAAAAAAAAAAAAAAAAAAAA 20
 RESULT 1135
 ADH67348/c
 ID ADH67348 standard; DNA; 20 BP.
 XX ADH67348;
 XX 25-MAR-2004 (first entry)
 DT Human glucocorticoid receptor-specific antisense oligonucleotide #4182.
 DE
 DE antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
 XX OS Homo sapiens.
 OS WO2003099215-A2.
 PN 04-DEC-2003.
 PD 20-MAY-2003; 2003WO-US016084.
 PF 20-MAY-2002; 2002US-0381857P.
 PR (PHAA) PHARMACIA CORP.
 PA Crosby SD, Nalseth AE;
 XX WPI; 2004-035034/03.
 DR New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor; useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
 XX Claim 4; SEQ ID NO 4182; 985pp; English.
 XX The invention comprises an antisense oligonucleotides that are targeted
 CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
 CC antisense oligonucleotides of the invention are useful for preventing or
 CC delaying infection, inflammation or tumour formation. The antisense

CC oligonucleotides are also useful for treating diabetes, obesity, The
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 19 AAAAAAAAAAAAAAAAAA 2

RESULT 1136
ADH67401/C
ID ADH67401 standard; DNA; 20 BP.
XX
AC ADH67401;
XX
XX 25-MAR-2004 (first entry)
DE Human glucocorticoid receptor-specific antisense oligonucleotide #4235.
XX
XX antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS Homo sapiens.
XX
XX WO2003099215-A2.
PN
PD 04-DEC-2003.
XX
XX 20-MAY-2003; 2003WO-US016084.
PF
XX 20-MAY-2002; 2002US-0381857P.
PR
XX (PHAA) PHARMACIA CORP.
PA
XX Crosby SD, Naleeth AE;
PI
XX WPI; 2004-035034/03.
DR
XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
XX Claim 4; SEQ ID NO 4235; 985pp; English.

XX The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 20 AAAAAAAAAAAAAAAAAA 3

Query Match 0.7%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 20 AAAAAAAAAAAAAAAAAA 3

RESULT 1137
ADK74688/C
ID ADK74688 standard; DNA; 20 BP.
XX
AC ADK74688;
XX
XX 20-MAY-2004 (first entry)
DT Chimeric phosphorothioate oligonucleotide to target Navi.3 #2022.
DE
XX Navi.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
XX WO2004016754-A2.
PN
XX 26-FEB-2004.
PD
XX 14-AUG-2003; 2003WO-US025465.
PF
XX 14-AUG-2002; 2002US-0403416P.
PR
XX (PHAA) PHARMACIA CORP.
PA
XX Roberts SL;
PI
XX WPI; 2004-203785/19.
DR
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Navi.3, useful for treating a disease or condition associated
PT with Navi.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 2022; 417pp; English.

XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Navi.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Navi.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Navi.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Navi.3 expression, the oligonucleotides are designed to target
CC different regions of the human Navi.3 RNA.

SQ Sequence 20 BP; 0 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1138
ADK74367/C
ID ADK74367 standard; DNA; 20 BP.
XX
AC ADK74367;
XX
XX 20-MAY-2004 (first entry)
DT
XX

DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1701.
 XX
 KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
 KW diabetic neuropathy; arthritic pain; migraine headache;
 KW infantile epilepsy; ataxia; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004016754-A2.
 XX
 PD 26-FEB-2004.
 XX
 PF 14-AUG-2003; 2003WO-US025465.
 XX
 PR 14-AUG-2002; 2002US-0403416P.
 XX
 XX (PHAA) PHARMACIA CORP.
 PA
 XX Robertd SL;
 XX
 DR WPI; 2004-203785/19.
 XX
 XX New antisense compound targeted to a nucleic acid molecule encoding
 PT Nav1.3, useful for treating a disease or condition associated
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
 PT disorder, or ataxia.
 XX
 PS Claim 4; SEQ ID NO 1701; 417pp; English.
 XX
 CC The present invention relates to an antisense compound targeted to a
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The
 CC compound and composition are useful for treating a disease or condition
 CC associated with Nav1.3, e.g. pain including but not limited to
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate
 CC headache; seizure disorder such as childhood seizure disorder, including
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
 CC sequence represents a chimeric phosphorothioate oligonucleotide with
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
 CC human Nav1.3 expression, the oligonucleotides are designed to target
 CC different regions of the human Nav1.3 RNA.
 XX
 SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
 XX
 Query Match 0.7%; Score 18; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 9.1e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2726
 Db 20 AAAAAAAAAAAAAAAAAA 3
 RESULT 1139
 AED13298
 ID AED13298 standard; DNA; 20 BP.
 XX
 AC AED13298;
 XX
 DT 01-DEC-2005 (first entry)
 XX
 DE Oligonucleotide ODN6 used to illustrate nucleic acid labeling method.
 XX
 KW DNA detection; RNA detection; SNP detection; ss.
 XX
 OS Synthetic.
 XX
 PN JP2005265617-A.
 XX
 PD 29-SEP-2005.
 XX

PF 18-MAR-2004; 2004JP-00078900.
 XX
 PR 18-MAR-2004; 2004JP-00078900.
 XX
 PA (TAKE/) TAKENAKA S.
 XX
 PI Takenaka S, Nojima T, Mukumoto K, Tabata E;
 XX
 DR WPI; 2005-685344/71.
 XX
 XX Labeling double stranded nucleic acid, involves utilizing carbodiimide
 PT derivative for labeling thymine, uracil and guanine, which exists in
 PT mismatch region of nucleic acid or unstable region of hydrogen bond of
 PT nucleic acid.
 XX
 PS Example 1; Page 24; 40pp; Japanese.
 XX
 CC The present invention relates to a method (M1) for labeling double
 CC stranded nucleic acid for efficient detection of DNA or RNA. The method
 CC comprises using a carbodiimide derivative for labeling one or more of
 CC thymine, uracil and guanine, which exists in the mismatch region of the
 CC double stranded nucleic acid or its vicinity, or unstable region of the
 CC hydrogen bond of the double stranded nucleic acid. (M1) is useful for
 CC labeling double stranded or single stranded nucleic acid or detecting
 CC single nucleotide polymorphisms. The present sequence was used to
 CC illustrate the method of the invention.
 XX
 SQ Sequence 20 BP; 17 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
 XX
 Query Match 0.7%; Score 18; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 9.1e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAA 2725
 Db 3 TAAAAAAAAAAAAAAAAA 20
 RESULT 1140
 AAQ75702/c
 ID AAQ75702 standard; DNA; 21 BP.
 XX
 AC AAQ75702;
 XX
 DT 04-AUG-1995 (first entry)
 XX
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 PN JP06303997-A.
 XX
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 PA
 DR WPI; 1995-018287/03.
 XX
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 PS Disclosure; Page 7; 11pp; Japanese.
 XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)

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CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 3 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
DB 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1141
AAQ75724/c
ID AAQ75724 standard; DNA; 21 BP.
XX
AC AAQ75724;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 4 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
DB 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1142
AAQ75671/c
ID AAQ75671 standard; DNA; 21 BP.
XX

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AC AAQ75671;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725
DB 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1143
AAQ75733/c
ID AAQ75733 standard; DNA; 21 BP.
XX
AC AAQ75733;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX

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DR WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2725
DB 18 TAAAAAATAAAAAAAAAA 1

RESULT 1144
AAQ75674/c
ID AAQ75674 standard; DNA; 21 BP.
XX AAQ75674;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2725
DB 18 TAAAAAATAAAAAAAAAA 1

RESULT 1146
AAQ75693/c
ID AAQ75693 standard; DNA; 21 BP.
XX AAQ75693;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX
SQ Sequence 21 BP; 1 A; 1 C; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2708 TAAAAAATAAAAAAAAAA 2725
DB 18 TAAAAAATAAAAAAAAAA 1

RESULT 1145
AAQ75687/c
ID AAQ75687 standard; DNA; 21 BP.
XX AAQ75687;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX 16-APR-1993; 93JP-00112515.
XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2725
DB 18 TAAAAAATAAAAAAAAAA 1

RESULT 1146
AAQ75693/c
ID AAQ75693 standard; DNA; 21 BP.
XX AAQ75693;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX
SQ Sequence 21 BP; 1 A; 1 C; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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PN JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1147
XX AAQ75725/c
XX ID AAQ75725 standard; DNA; 21 BP.
XX
XX AC AAQ75725;
XX
XX XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1147
XX AAQ75725/c
XX ID AAQ75725 standard; DNA; 21 BP.
XX
XX AC AAQ75725;
XX
XX XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse

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CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 3 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1148
XX AAQ75732/c
XX ID AAQ75732 standard; DNA; 21 BP.
XX
XX AC AAQ75732;
XX
XX XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 8; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 3 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 18; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1149
XX AAQ75684/c
XX ID AAQ75684 standard; DNA; 21 BP.
XX
XX AC AAQ75684;

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XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
DE Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS JP06303997-A.
XX PN 01-NOV-1994.
XX PD 16-APR-1993; 93JP-00112515.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 7; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1

RESULT 1150
AAQ75690/c
ID AAQ75690 standard; DNA; 21 BP.
XX AC AAQ75690;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS JP06303997-A.
XX PN 01-NOV-1994.
XX PD 16-APR-1993; 93JP-00112515.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 7; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1

RESULT 1150
AAQ75690/c
ID AAQ75690 standard; DNA; 21 BP.
XX AC AAQ75690;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS JP06303997-A.
XX PN 01-NOV-1994.
XX PD 16-APR-1993; 93JP-00112515.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 7; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 7; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2725
Db 18 TAAAAAATAAAAAAAAAA 1

RESULT 1151
AAQ75688/c
ID AAQ75688 standard; DNA; 21 BP.
XX AC AAQ75688;
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS JP06303997-A.
XX PN 01-NOV-1994.
XX PD 16-APR-1993; 93JP-00112515.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 7; 11pp; Japanese.
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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OY 2708 TAAAAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAAAAA 1

RESULT 1152
AAQ75694/c
ID AAQ75694 standard; DNA; 21 BP.
XX
AC AAQ75694;
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
KW
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX Disclosure; Page 7; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
SQ

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2708 TAAAAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAAAAA 1

RESULT 1154
AAQ75686/c
ID AAQ75686 standard; DNA; 21 BP.
XX
XX AAQ75686;
AC
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
KW
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX Disclosure; Page 7; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
SQ

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2708 TAAAAAAAAAAAAAAAAAAAA 2725
Db 18 TAAAAAAAAAAAAAAAAAAAA 1

RESULT 1153
AAQ75700/c
ID AAQ75700 standard; DNA; 21 BP.
XX
AC AAQ75700;
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
KW
XX Synthetic.
OS
XX JP06303997-A.
PN

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CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

Query Match          0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA... 2725
Db 18 TAAAAA... 1

RESULT 1155
AAQ75689/c
ID AAQ75689 standard; DNA; 21 BP.
XX
AC AAQ75689;
XX
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
DE
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match          0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA... 2725
Db 18 TAAAAA... 1

RESULT 1156
AAQ75723/c
ID AAQ75723 standard; DNA; 21 BP.
XX
AC AAQ75723;
XX
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
DE
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX

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DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
DE
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 8; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 3 A; 0 C; 1 G; 17 T; 0 U; 0 Other;

Query Match          0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA... 2725
Db 18 TAAAAA... 1

RESULT 1157
AAQ75726/c
ID AAQ75726 standard; DNA; 21 BP.
XX
AC AAQ75726;
XX
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
DE
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX

```

PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

PS Disclosure; Page 8; 1lpp; Japanese.

XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 3 A; 1 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725

DB 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1158

AAQ75692/c

ID AAQ75692 standard; DNA; 21 BP.

XX AC AAQ75692;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

PS Disclosure; Page 7; 1lpp; Japanese.

XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 3 A; 1 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725

DB 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1159

AAQ75672/c

ID AAQ75672 standard; DNA; 21 BP.

XX AC AAQ75672;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX Disclosure; Page 7; 1lpp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAAA 2725

DB 18 TAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1160

AAQ75685/c

ID AAQ75685 standard; DNA; 21 BP.

XX AC AAQ75685;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

KW Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

PD 01-NOV-1994.
 XX 16-APR-1993; 93JP-00112515.
 XX 16-APR-1993; 93JP-00112515.
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 DR Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 7; 11pp; Japanese.
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAA 2725
 DB 18 TAAAAAAAAAAAAAAAAA 1
 RESULT 1161
 AAQ75699/C
 ID AAQ75699 standard; DNA; 21 BP.
 XX AC AAQ75699;
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.
 DE Analysis; Gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 KW Synthetic.
 OS JP06303997-A.
 XX 01-NOV-1994.
 XX 16-APR-1993; 93JP-00112515.
 XX 16-APR-1993; 93JP-00112515.
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 7; 11pp; Japanese.
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX Sequence 21 BP; 1 A; 1 C; 0 G; 19 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAA 2725
 DB 18 TAAAAAAAAAAAAAAAAA 1
 RESULT 1161
 AAQ75699/C
 ID AAQ75699 standard; DNA; 21 BP.
 XX AC AAQ75699;
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.
 DE Analysis; Gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 KW Synthetic.
 OS JP06303997-A.
 XX 01-NOV-1994.
 XX 16-APR-1993; 93JP-00112515.
 XX 16-APR-1993; 93JP-00112515.
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 7; 11pp; Japanese.
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)

CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAA 2725
 DB 18 TAAAAAAAAAAAAAAAAA 1
 RESULT 1162
 AAQ75731/C
 ID AAQ75731 standard; DNA; 21 BP.
 XX AC AAQ75731;
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.
 DE Analysis; Gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 KW Synthetic.
 OS JP06303997-A.
 XX 01-NOV-1994.
 XX 16-APR-1993; 93JP-00112515.
 XX 16-APR-1993; 93JP-00112515.
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 8; 11pp; Japanese.
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAA 2725
 DB 18 TAAAAAAAAAAAAAAAAA 1
 RESULT 1163
 AAQ75673/C
 ID AAQ75673 standard; DNA; 21 BP.
 XX AC AAQ75673;
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.


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Db      18 TAAAAAAAAAAAAAAAAAAAA 1

RESULT 1166
AAQ75683/c
ID      AAQ75683 standard; DNA; 21 BP.
XX
XX      AC      AAQ75683;
XX
XX      DT      04-AUG-1995 (first entry)
XX
XX      DE      Reverse transcription primer used in cDNA analysis technique.
XX
XX      KW      Analysis; gene expression; reverse transcription; primer; cDNA;
XX      aggregate; restriction enzyme; ss.
XX      OS      Synthetic.
XX
XX      PN      JP06303997-A.
XX
XX      PD      01-NOV-1994.
XX
XX      PF      16-APR-1993; 93JP-00112515.
XX
XX      PR      16-APR-1993; 93JP-00112515.
XX
XX      PA      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX      DR      WPI; 1995-018287/03.
XX
XX      PS      Disclosure; Page 7; 11pp; Japanese.
XX
XX      CC      A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX      double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX      labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX      and using the aggregate of mRNAs as the template for each reverse
XX      transcription primer; (b) digesting each of the prepared aggregates of
XX      the double-stranded cDNAs with restriction enzyme and; (c)
XX      electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX      method can be used to analyse gene expression rapidly and easily
XX
XX      SQ      Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX      Query Match      0.7%; Score 18; DB 1; Length 21;
XX      Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX      Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2708 TAAAAAAAAAAAAAAAAAAAA 2725
Db      18 TAAAAAAAAAAAAAAAAAAAA 1

RESULT 1167
AAQ75701/c
ID      AAQ75701 standard; DNA; 21 BP.
XX
XX      AC      AAQ75701;
XX
XX      DT      04-AUG-1995 (first entry)
XX
XX      DE      Reverse transcription primer used in cDNA analysis technique.
XX
XX      KW      Analysis; gene expression; reverse transcription; primer; cDNA;
XX      aggregate; restriction enzyme; ss.
XX      OS      Synthetic.
XX
XX      PN      JP06303997-A.
XX
XX      PD      01-NOV-1994.
XX
XX      PF      16-APR-1993; 93JP-00112515.
XX
XX      PR      16-APR-1993; 93JP-00112515.
XX
XX      PA      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX      DR      WPI; 1995-018287/03.
XX
XX      PS      Disclosure; Page 7; 11pp; Japanese.
XX
XX      CC      A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX      double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX      labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX      and using the aggregate of mRNAs as the template for each reverse
XX      transcription primer; (b) digesting each of the prepared aggregates of
XX      the double-stranded cDNAs with restriction enzyme and; (c)
XX      electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX      method can be used to analyse gene expression rapidly and easily
XX
XX      SQ      Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX      Query Match      0.7%; Score 18; DB 1; Length 21;
XX      Best Local Similarity 100.0%; Pred. No. 9.3e+02;
XX      Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2708 TAAAAAAAAAAAAAAAAAAAA 2725
Db      18 TAAAAAAAAAAAAAAAAAAAA 1

RESULT 1168
ADK01323/c
ID      ADK01323 standard; DNA; 21 BP.
XX
XX      AC      ADK01323;
XX
XX      DT      06-MAY-2004 (first entry)
XX
XX      DE      Rat DNA microarray capture oligonucleotide #43.
XX
XX      KW      ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
XX      blood; nerve; germ cell; food additive; food supplement.
XX
XX      OS      Rattus sp.
XX
XX      PN      DE10208794-A1.
XX
XX      PD      04-SEP-2003.
XX
XX      PF      28-FEB-2002; 2002DE-01008794.
XX
XX      PR      28-FEB-2002; 2002DE-01008794.
XX
XX      PA      (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX      PI      Boekenkamp D, Dieck HT, Hoppe H;
XX
XX      DR      WPI; 2003-714082/68.
XX
XX      PT      Sorting single-stranded nucleic acid, useful for analyzing expression
XX      patterns and screening active agents, uses capture agent with variable
XX      and constant regions.
XX
XX      PS      Example; Page 5; 8pp; German.
XX
XX      CC      This invention describes a novel method for sorting single-stranded
XX      nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX      reading out, where the nucleic acids are selectively bound using capture
XX      agents that are (a) immobilised on the surface of a solid matrix and (b)

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comprise variable and non-variable regions. The capture oligonucleotides have a 5'-invariable anchor region, the complement of which is present at least once in each nucleic acid and a 3'-variable, discriminatory region that comprises all possible combinations of up to 10 nucleotides to allow binding of particular sorts of single stranded nucleic acids. The capture agents are particularly locked nucleic acids (LNA) and the anchor region comprises a sequence of 10-50, particularly 15-25, T residues. The capture oligonucleotides are biotinylated and immobilised on a surface by interaction with streptavidin. The matrix is of plastic, ceramic, glass, metal, resin, gel, crystalline material and/or membrane, having semi-conducting properties and especially in the form of a chip. Its surface is particularly a layer of (bio)molecular filaments and binding of single stranded nucleic acids to the surface is (quasi)covalent, supramolecular, physical, stimulated by an electrical field or through a molecular sieve. The method is used (i) for analysis of patterns, especially in mucosal, hair root, blood, nerve or germ cells and (ii) for determining the activity of pharmaceuticals and/or nutritional compounds, e.g. food additives or supplements, especially minerals, trace elements, organic acids (amino, carboxylic or fatty acid) or their derivatives, salts and mixtures. The method provides rapid, inexpensive and reproducible representation of differences in pools of nucleic acids from cells. It allows imaging of the complete pattern of all nucleic acid in a cell, and can detect very small differences in the nucleic acid pool. Since the method is based on comparison of nucleic acid pools, not individual genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 3 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1169
ADK01307/C
ID ADK01307 standard; DNA; 21 BP.
XX ADK01307;
XX 06-MAY-2004 (first entry)
XX Rat DNA microarray capture oligonucleotide #27.
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX Rattus sp.
XX DE10208794-A1.
XX 04-SEP-2003.
XX 28-FEB-2002; 2002DE-01008794.
XX 28-FEB-2002; 2002DE-01008794.
XX (DEGS) DEGUSSA BIOACTIVES GMBH.
XX Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression patterns and screening active agents, uses capture agent with variable and constant regions.
XX Example; Page 5; 8pp; German.

This invention describes a novel method for sorting single-stranded nucleic acids by isolation and hybridisation of nucleic acid pools, then reading out, where the nucleic acids are selectively bound using capture agents that are (a) immobilised on the surface of a solid matrix and (b) comprise variable and non-variable regions. The capture oligonucleotides have a 5'-invariable anchor region, the complement of which is present at least once in each nucleic acid and a 3'-variable, discriminatory region that comprises all possible combinations of up to 10 nucleotides to allow binding of particular sorts of single stranded nucleic acids. The capture agents are particularly locked nucleic acids (LNA) and the anchor region comprises a sequence of 10-50, particularly 15-25, T residues. The capture oligonucleotides are biotinylated and immobilised on a surface by interaction with streptavidin. The matrix is of plastic, ceramic, glass, metal, resin, gel, crystalline material and/or membrane, having semi-conducting properties and especially in the form of a chip. Its surface is particularly a layer of (bio)molecular filaments and binding of single stranded nucleic acids to the surface is (quasi)covalent, supramolecular, physical, stimulated by an electrical field or through a molecular sieve. The method is used (i) for analysis of patterns, especially in mucosal, hair root, blood, nerve or germ cells and (ii) for determining the activity of pharmaceuticals and/or nutritional compounds, e.g. food additives or supplements, especially minerals, trace elements, organic acids (amino, carboxylic or fatty acid) or their derivatives, salts and mixtures. The method provides rapid, inexpensive and reproducible representation of differences in pools of nucleic acids from cells. It allows imaging of the complete pattern of all nucleic acid in a cell, and can detect very small differences in the nucleic acid pool. Since the method is based on comparison of nucleic acid pools, not individual genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent capture probes used in the method of the invention.

XX Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1170
ADK01306/C
ID ADK01306 standard; DNA; 21 BP.
XX ADK01306;
XX 06-MAY-2004 (first entry)
XX Rat DNA microarray capture oligonucleotide #26.
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX Rattus sp.
XX DE10208794-A1.
XX 04-SEP-2003.
XX 28-FEB-2002; 2002DE-01008794.
XX 28-FEB-2002; 2002DE-01008794.
XX (DEGS) DEGUSSA BIOACTIVES GMBH.
XX Boekenkamp D, Dieck HT, Hoppe H;
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression patterns and screening active agents, uses capture agent with variable

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PT and constant regions.
XX
PS Example; Page 5; 8pp; German.
XX
CC This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. NO. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db |||||
18 AAAAAAAAAAAAAAAAAA 1

RESULT 1171
ADK01305/c
ID ADK01305 standard; DNA; 21 BP.
AC ADK01305;
XX
XX 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #25.
XX
ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX
XX DE10208794-A1.
PN
PD 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
PF
XX 28-FEB-2002; 2002DE-01008794.
PR
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
PA
XX Boetenkamp D, Dieck HT, Hoppe H;
PI
XX

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DR WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. NO. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db |||||
18 AAAAAAAAAAAAAAAAAA 1

RESULT 1172
ADK01308/c
ID ADK01308 standard; DNA; 21 BP.
AC ADK01308;
XX
XX 06-MAY-2004 (first entry)
XX
DE Rat DNA microarray capture oligonucleotide #28.
XX
ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
OS Rattus sp.
XX
XX DE10208794-A1.
PN
PD 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
PF
XX 28-FEB-2002; 2002DE-01008794.
PR
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
PA
XX Boetenkamp D, Dieck HT, Hoppe H;
PI
XX

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PA (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
PI Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
XX Example; Page 5; 8pp; German.
PS
XX This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1173
ADK01321/c
ID ADK01321 standard; DNA; 21 BP.
XX
XX ADK01321;
XX
XX 06-MAY-2004 (first entry)
XX
XX Rat DNA microarray capture oligonucleotide #41.
DE
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
OS
XX DE10208794-A1.
PN
XX 04-SEP-2003.
PD
XX

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PF 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
PT patterns and screening active agents, uses capture agent with variable
PT and constant regions.
XX
XX Example; Page 5; 8pp; German.
PS
XX This invention describes a novel method for sorting single-stranded
CC nucleic acids by isolation and hybridisation of nucleic acid pools, then
CC reading out, where the nucleic acids are selectively bound using capture
CC agents that are (a) immobilised on the surface of a solid matrix and (b)
CC comprise variable and non-variable regions. The capture oligonucleotides
CC have a 5'-invariable anchor region, the complement of which is present at
CC least once in each nucleic acid and a 3'-variable, discriminatory region
CC that comprises all possible combinations of up to 10 nucleotides to allow
CC binding of particular sorts of single stranded nucleic acids. The capture
CC agents are particularly locked nucleic acids (LNA) and the anchor region
CC comprises a sequence of 10-50, particularly 15-25, T residues. The
CC capture oligonucleotides are biotinylated and immobilised on a surface by
CC interaction with streptavidin. The matrix is of plastic, ceramic, glass,
CC metal, resin, gel, crystalline material and/or membrane, having semi-
CC conducting properties and especially in the form of a chip. Its surface
CC is particularly a layer of (bio)molecular filaments and binding of single
CC stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
CC physical, stimulated by an electrical field or through a molecular sieve.
CC The method is used (i) for analysis of patterns, especially in mucosal,
CC hair root, blood, nerve or germ cells and (ii) for determining the
CC activity of pharmaceuticals and/or nutritional compounds, e.g. food
CC additives or supplements, especially minerals, trace elements, organic
CC acids (amino, carboxylic or fatty acid) or their derivatives, salts and
CC mixtures. The method provides rapid, inexpensive and reproducible
CC representation of differences in pools of nucleic acids from cells. It
CC allows imaging of the complete pattern of all nucleic acid in a cell, and
CC can detect very small differences in the nucleic acid pool. Since the
CC method is based on comparison of nucleic acid pools, not individual
CC genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
CC capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
DB 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1174
ADK01322/c
ID ADK01322 standard; DNA; 21 BP.
XX
XX ADK01322;
XX
XX 06-MAY-2004 (first entry)
XX
XX Rat DNA microarray capture oligonucleotide #42.
DE
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;
KW blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
OS
XX

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BN DE10208794-A1.
XX
PD 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX metal, resin, gel, crystalline material and/or membrane, having semi-
XX conducting properties and especially in the form of a chip. Its surface
XX is particularly a layer of (biomolecular filaments and binding of single
XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX physical, stimulated by an electrical field or through a molecular sieve.
XX The method is used (i) for analysis of patterns, especially in mucosal,
XX hair root, blood, nerve or germ cells and (ii) for determining the
XX activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX additives or supplements, especially minerals, trace elements, organic
XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX mixtures. The method provides rapid, inexpensive and reproducible
XX representation of differences in pools of nucleic acids from cells. It
XX allows imaging of the complete pattern of all nucleic acid in a cell, and
XX can detect very small differences in the nucleic acid pool. Since the
XX method is based on comparison of nucleic acid pools, not individual
XX genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1175
ADK01324/c
ID ADK01324 standard; DNA; 21 BP.
XX
XX ADK01324;
XX
XX 06-MAY-2004 (first entry)
XX
XX Rat DNA microarray capture oligonucleotide #44.
XX
XX ss; hybridisation; capture oligonucleotide; pattern; mucosal; hair root;

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KW blood; nerve; germ cell; food additive; food supplement.
XX
XX Rattus sp.
XX
XX DE10208794-A1.
XX
XX 04-SEP-2003.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX 28-FEB-2002; 2002DE-01008794.
XX
XX (DEGS ) DEGUSSA BIOACTIVES GMBH.
XX
XX Boekenkamp D, Dieck HT, Hoppe H;
XX
XX WPI; 2003-714082/68.
XX
XX Sorting single-stranded nucleic acid, useful for analyzing expression
XX patterns and screening active agents, uses capture agent with variable
XX and constant regions.
XX
XX Example; Page 5; 8pp; German.
XX
XX This invention describes a novel method for sorting single-stranded
XX nucleic acids by isolation and hybridisation of nucleic acid pools, then
XX reading out, where the nucleic acids are selectively bound using capture
XX agents that are (a) immobilised on the surface of a solid matrix and (b)
XX comprise variable and non-variable regions. The capture oligonucleotides
XX have a 5'-invariable anchor region, the complement of which is present at
XX least once in each nucleic acid and a 3'-variable, discriminatory region
XX that comprises all possible combinations of up to 10 nucleotides to allow
XX binding of particular sorts of single stranded nucleic acids. The capture
XX agents are particularly locked nucleic acids (LNA) and the anchor region
XX comprises a sequence of 10-50, particularly 15-25, T residues. The
XX capture oligonucleotides are biotinylated and immobilised on a surface by
XX interaction with streptavidin. The matrix is of plastic, ceramic, glass,
XX metal, resin, gel, crystalline material and/or membrane, having semi-
XX conducting properties and especially in the form of a chip. Its surface
XX is particularly a layer of (biomolecular filaments and binding of single
XX stranded nucleic acids to the surface is (quasi)covalent, supramolecular,
XX physical, stimulated by an electrical field or through a molecular sieve.
XX The method is used (i) for analysis of patterns, especially in mucosal,
XX hair root, blood, nerve or germ cells and (ii) for determining the
XX activity of pharmaceuticals and/or nutritional compounds, e.g. food
XX additives or supplements, especially minerals, trace elements, organic
XX acids (amino, carboxylic or fatty acid) or their derivatives, salts and
XX mixtures. The method provides rapid, inexpensive and reproducible
XX representation of differences in pools of nucleic acids from cells. It
XX allows imaging of the complete pattern of all nucleic acid in a cell, and
XX can detect very small differences in the nucleic acid pool. Since the
XX method is based on comparison of nucleic acid pools, not individual
XX genes, matrix miniaturisation is possible. ADK01281-ADK01344 represent
XX capture probes used in the method of the invention.
XX
XX Sequence 21 BP; 0 A; 2 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726
Db 18 AAAAAAAAAAAAAAAAAA 1

RESULT 1176
ABD25933
ID ABD25933 standard; DNA; 21 BP.
XX
XX ABD25933;
XX
XX 29-JUL-2004 (first entry)

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XX DE AA505075-derived oligonucleotide SEQ ID 4945.
 XX KW Human; antisease; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.
 XX XX Homo sapiens.
 XX XX WO200285309-A2.
 XX PD 31-OCT-2002.
 XX XX 23-APR-2002; 2002WO-US013143.
 XX PF 24-APR-2001; 2001US-0286036P.
 XX PR (EPTG-) EPIGENESIS PHARM INC.
 XX PA Nyce JW, Li Y, Sandraesgra A, Katz E, Pabalan J, Aguilar D;
 XX PI Miller S, Tang L, Shahabuddin S;
 XX PI WPI; 2003-093058/08.
 XX DR
 XX XX Pharmaceutical composition for treating asthma, has antisease
 XX PT oligonucleotide containing less percentage of adenosine, targeted to
 XX PT nucleic acids associated with lung airway or lung dysfunction, and
 XX PT bronchodilating agent.
 XX XX Claim 15; SEQ ID NO 4945; 763pp; English.
 XX XX This invention describes a novel composition (a) a first active agent,
 XX CC comprising oligonucleotides, effective for alleviating
 XX CC bronchoconstriction, respiratory tract inflammation, allergies and
 XX CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 XX CC surfactant depletion or hyposecretion, when administered to a mammal. The
 XX CC oligonucleotides are derived from a gene encoding or regulating
 XX CC expression of a target polypeptide associated with lung airway or lung
 XX CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 XX CC The invention also describes a kit, that comprises: (a) a delivery
 XX CC device, in separate containers, (b) the oligonucleotides, (c)
 XX CC instructions for adding a carrier and for use of the kit. The composition
 XX CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 XX CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 XX CC beta-adrenergic agonist. The composition is useful for preventing or
 XX CC treating a respiratory, lung or malignant disease. The administered
 XX CC composition comprises oligo and is administered to reduce the production
 XX CC or availability, or to increase the degradation of the target mRNA or to
 XX CC reduce the amount of target polypeptide present in the lungs. The
 XX CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 XX CC inflammation, allergies and/or surfactant hypoproduction are associated
 XX CC with a disease or condition such as pulmonary vasoconstriction,
 XX CC inflammation, allergies, asthma, impeded respiration, respiratory
 XX CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 XX CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 XX CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 XX CC The reduced adenosine content of the anti-sense oligos corresponding to
 XX CC thymidines present in the target RNA serves to prevent the breakdown of
 XX CC the oligonucleotides into products that free adenosine into the system
 XX CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 XX CC prevent any unwanted effects due to it .
 XX XX Sequence 21 BP; 17 A; 0 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2725
 DB ||||||||||||||||
 4 TAAAAAAAAAAAAAAAAA 21
 RESULT 1177
 ADP86142/c
 ID ADP86142 standard; DNA; 21 BP.
 XX AC ADP86142;
 XX DT 09-SEP-2004 (first entry)
 XX XX CpG immunostimulatory oligonucleotide #13.
 XX KW CpG immunostimulatory oligonucleotide; immune response; allergy; asthma;
 KW viral infection; bacterial infection; cancer; lymphoma;
 KW intraepithelial neoplasm; melanoma; neuroblastoma; Hodgkin's lymphoma;
 KW carcinoma; sarcoma; gene therapy; phosphorothioate; ss.
 XX OS Unidentified.
 XX FH Key Location/Qualifiers
 FT modified_base 1..21
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 XX PN WO2004053104-A2.
 XX XX 24-JUN-2004.
 XX XX 11-DEC-2003; 2003WO-US039775.
 XX PR 11-DEC-2002; 2002US-0432409P.
 XX PR 25-SEP-2003; 2003US-0506108P.
 XX XX (COLE-) COLEY PHARM GROUP INC.
 XX XX (COLE-) COLEY PHARM GMBH.
 XX PI Krieg AM, Jurk M, Vollmer J, Uhlmann E;
 XX WPI; 2004-487902/46.
 XX PT New oligonucleotides, useful for treating allergy or asthma, viral and
 XX PT bacterial infections, and cancer, e.g. biliary tract cancer, breast
 XX PT cancer, cervical cancer.
 XX PS Example; SEQ ID NO 13; 104pp; English.
 XX XX The invention relates to a class of CpG immunostimulatory
 XX CC oligonucleotides containing a 5'TCG motif or a CG at or the 5' end that
 XX CC are useful for stimulating an immune response. Oligonucleotides and
 XX CC compositions of the invention are useful for treating allergy or asthma,
 XX CC viral and bacterial infections and cancer e.g. biliary tract cancer,
 XX CC breast cancer, cervical cancer, choriocarcinoma, colon cancer,
 XX CC endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
 XX CC liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
 XX CC neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,
 XX CC rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
 XX CC and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,
 XX CC Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
 XX CC testicular cancer, as well as other carcinomas and sarcomas. The
 XX CC invention is also useful in gene therapy. The present sequence is a CpG
 XX CC immunostimulatory oligonucleotide.
 XX XX Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.7%; Score 18; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 9.3e+02;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2726

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Db      21  AAAAAAAAAAAAAAAAAAAAA 4
RESULT 1178
ADX69527/c
ID ADX69527 standard; DNA; 21 BP.
XX
AC ADX69527;
XX
DT 21-APR-2005 (first entry)
XX
DE Mouse ICAM-1 binding protein associated PCR primer SEQ ID NO 10.
XX
KW ICAM-1 binding protein; ICAM-1; inflammation; ss; PCR; primer.
XX
OS Synthetic.
XX
PN KR2004078763-A.
XX
PD 13-SEP-2004.
XX
PF 05-MAR-2003; 2003KR-00013610.
XX
PR 05-MAR-2003; 2003KR-00013610.
XX
PA (HAHN/) HAHN J H.
XX
PA (LEEW/) LEE W J.
XX
PI Hahn JH, Lee WJ;
XX
XX WPI; 2005-077558/09.
XX
PT ICAM-1 binding protein, and polynucleotide encoding the same, vector and
PT host cell containing the same polynucleotide, and composition comprising
PT the same protein.
XX
PS Example 2; SEQ ID NO 10; 16pp; Korean.
XX
CC The invention relates to an ICAM-1 binding protein, and a polynucleotide
CC encoding the same, a vector and a host cell containing the same
CC polynucleotide, and a composition comprising the same protein are
CC provided. The ICAM-1 binding protein has high specificity to ICAM-1 and
CC small molecular size, so that it can be effectively expressed in
CC Escherichia coli. and the composition containing the ICAM-1 binding
CC protein has improved stability and excellent tissue penetration, so that
CC it can be useful for the treatment of inflammation. The present sequence
CC represents a mouse ICAM-1 binding protein associated PCR primer.
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2726
Db      21  AAAAAAAAAAAAAAAAAAAAA 4
RESULT 1179
AAQ64706/c
ID AAQ64706 standard; cDNA to mRNA; 22 BP.
XX
AC AAQ64706;
XX
XX 25-MAR-2003 (revised)
DT 04-JAN-1995 (first entry)
XX
DE 2',5'-linked tetraadenylate-antisense oligonucleotide chimeric mol.
XX
XX antisense; 2',5'-tetraadenylate; 2-5A dependent RNase activator;
KW RNA cleavage; antiviral therapy; chimeric molecule; ss.

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XX Synthetic.
XX Key misc_feature Location/Qualifiers
FT 1. .4
FT /tag= a
FT /label= 2',5'-linked tetraadenylate
FT /note= "nucleotides linked through phosphodiester bonds
FT at hydroxyl groups of 2' and 5' carbons"
FT 5. .22
FT /tag= b
FT /note= "antisense region"
XX
PN WO9409129-A2.
XX
XX 28-APR-1994.
XX
XX 20-OCT-1993; 93WO-US010103.
XX
XX 21-OCT-1992; 92US-00965666.
XX 17-SEP-1993; 93US-00123449.
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX (CLEV-) CLEVELAND CLINIC RES INST.
XX
XX Torrence P, Silverman R, Maitra R, Lesiak K;
XX WPI; 1994-151315/18.
XX
XX Specific cleavage of RNA, useful partic. for treating viral infection,
XX cancers, etc. - by using anti-sense oligo:nucleotide coupled to activator
XX of 2-5A dependent RNase.
XX
XX Example 1; Page 68; 86pp; English.
XX
XX This sequence is an example of a 2-5A-antisense oligonucleotide chimeric
XX molecule. The antisense region targets the chimeric molecule to a
XX particular region of RNA to be specifically cleaved and the 2',5'-linked
XX tetraadenylate tail activates the 2-5A RNase. Typical applications are
XX treatment of viral infections (esp. for cleavage of an RNA virus genome),
XX cancer; leukaemia, cardiovascular disorders (e.g. restenosis after
XX angioplasty), genetic disorders, osteoarthritis or rheumatoid arthritis.
XX (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 22 BP; 4 A; 0 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.7%; Score 18; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAAAAAA 2726
Db      22  AAAAAAAAAAAAAAAAAAAAA 5
RESULT 1180
AAQ75611/c
ID AAQ75611 standard; DNA; 21 BP.
XX
XX AC AAQ75611;
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.

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XX PF 16-APR-1993; 93JP-00112515.
XX XX
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XX
XX DR WPI; 1995-018287/03.
XX XX
XX XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 5; 1lpp; Japanese.
XX XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 0 C; 3 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2727
DB 21 CTCCTAAAAAATAAAAAAAAAA 1

RESULT 1181
AAQ75630/C
ID AAQ75630 standard; DNA; 21 BP.
XX AC AAQ75630;
XX XX
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; Gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XX
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 6; 1lpp; Japanese.
XX XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 0 C; 3 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2727
DB 21 CTCCTAAAAAATAAAAAAAAAA 1

RESULT 1181
AAQ75630/C
ID AAQ75630 standard; DNA; 21 BP.
XX AC AAQ75630;
XX XX
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; Gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XX
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 6; 1lpp; Japanese.
XX XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily

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CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2704 GTACTAAAAAATAAAAAAAAAA 2724
DB 21 GTTCAAAAAAATAAAAAAAAAA 1

RESULT 1182
AAQ75633/C
ID AAQ75633 standard; DNA; 21 BP.
XX AC AAQ75633;
XX XX
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; Gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XX
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 6; 1lpp; Japanese.
XX XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 0 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2706 ACTAAAAAATAAAAAAAAAA 2726
DB 21 AATCAAAAAAATAAAAAAAAAA 1

RESULT 1183
AAQ75651/C
ID AAQ75651 standard; DNA; 21 BP.
XX AC AAQ75651;
XX XX
XX DT 04-AUG-1995 (first entry)
XX XX

```

DE Reverse transcription primer used in cDNA analysis technique.
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 PN JP06303997-A.
 XX
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 XX WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 PS Disclosure; Page 6; 11pp; Japanese.
 XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;
 XX
 Query Match 0.6%; Score 17.8; DB 1; Length 21;
 Best Local Similarity 90.5%; Pred. No. 9.6e+02;
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 QY 2707 CTAAAAAATAAAAAAAAAAAAAA 2727
 DB 21 CGACAAAAAATAAAAAAAAAAAAAA 1
 XX
 RESULT 1184
 AAQ75748/c
 ID AAQ75748 standard; DNA; 21 BP.
 XX
 AC AAQ75748;
 XX
 DT 04-AUG-1995 (first entry)
 XX
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 PN JP06303997-A.
 XX
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 XX WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX Disclosure; Page 8; 11pp; Japanese.
 XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
 XX
 Query Match 0.6%; Score 17.8; DB 1; Length 21;
 Best Local Similarity 90.5%; Pred. No. 9.6e+02;
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 QY 2705 TACTAAAAAATAAAAAAAAAAAAAA 2725
 DB 21 TGGCAAAAAAATAAAAAAAAAAAAAA 1
 XX
 RESULT 1185
 AAQ75609/c
 ID AAQ75609 standard; DNA; 21 BP.
 XX
 AC AAQ75609;
 XX
 DT 04-AUG-1995 (first entry)
 XX
 DE Reverse transcription primer used in cDNA analysis technique.
 XX
 KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX
 OS Synthetic.
 XX
 PN JP06303997-A.
 XX
 PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 XX WPI; 1995-018287/03.
 XX
 PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX
 PS Disclosure; Page 5; 11pp; Japanese.
 XX
 CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 21 BP; 0 A; 0 C; 3 G; 18 T; 0 U; 0 Other;
 XX
 Query Match 0.6%; Score 17.8; DB 1; Length 21;
 Best Local Similarity 90.5%; Pred. No. 9.6e+02;
 Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 QY 2706 ACTAAAAAATAAAAAAAAAAAAAA 2726
 DB 21 ACCCAAAAAAATAAAAAAAAAAAAAA 1
 XX

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RESULT 1186
AAQ75620/c
ID AAQ75620 standard; DNA; 21 BP.
XX AC AAQ75620;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
DB 21 TCCCAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1187
AAQ75657/c
ID AAQ75657 standard; DNA; 21 BP.
XX AC AAQ75657;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
DB 21 TCCCAAAAAAAAAAAAAAAAAAAAA 1

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PF 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 6; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2706 ACTAAAAAAAAAAAAAAAAAAAA 2726
DB 21 ACGCAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1188
AAQ75664/c
ID AAQ75664 standard; DNA; 21 BP.
XX AC AAQ75664;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX

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XX SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
      Query Match          0.6%; Score 17.8; DB 1; Length 21;
      Best Local Similarity 90.5%; Pred. No. 9.6e+02;
      Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2705 TACTTAAAAA 2725
DB 21 TAGCAAAAAA 1

RESULT 1189
AAQ75736/c
ID AAQ75736 standard; DNA; 21 BP.
XX
XX AC AAQ75736;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX FN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 8; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
      Query Match          0.6%; Score 17.8; DB 1; Length 21;
      Best Local Similarity 90.5%; Pred. No. 9.6e+02;
      Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2705 TACTTAAAAA 2725
DB 21 TCCGAAAAAA 1

RESULT 1190
AAQ75627/c
ID AAQ75627 standard; DNA; 21 BP.
XX
XX AC AAQ75627;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.

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PS	Disclosure; Page 8; 11pp; Japanese.
XX	
CC	A method for the analysis of cDNA comprises (a) preparing an aggregate of double-stranded cDNAs by using an aggregate of mRNAs and a plural type of labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798) and using the aggregate of mRNAs as the template for each reverse transcription primer; (b) digesting each of the prepared aggregates of the double-stranded cDNAs with restriction enzyme and; (c) electrophoresing the digested aggregate of cDNAs in separate lanes. The method can be used to analyse gene expression rapidly and easily
XX	
SQ	Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
	Query Match 0.6%; Score 17.8; DB 1; Length 21; Best Local Similarity 90.5%; Pred. No. 9.6e+02; Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	2707 CTAAAAAATAAAAAAAAAAAAAA 2727
Db	21 CTCGAAAAAAAAAAAAAAAAAAAA 1
RESULT 1192	
AAQ75787/c	
ID	AAQ75787 standard; DNA; 21 BP.
XX	
AC	AAQ75787;
DT	04-AUG-1995 (first entry)
DE	Reverse transcription primer used in cDNA analysis technique.
XX	
KW	Analysis; gene expression; reverse transcription; primer; cDNA; aggregate; restriction enzyme; ss.
OS	Synthetic.
FN	JP06303997-A.
XX	
PD	01-NOV-1994.
XX	
PF	16-APR-1993; 93JP-00112515.
XX	
PR	16-APR-1993; 93JP-00112515.
XX	
PA	(NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX	
DR	WPI; 1995-018287/03.
XX	
PT	Analysis of cDNA and gene expression - by amplification of mRNA followed by digestion with restriction enzymes.
FT	Disclosure; Page 6; 11pp; Japanese.
XX	
CC	A method for the analysis of cDNA comprises (a) preparing an aggregate of double-stranded cDNAs by using an aggregate of mRNAs and a plural type of labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798) and using the aggregate of mRNAs as the template for each reverse transcription primer; (b) digesting each of the prepared aggregates of the double-stranded cDNAs with restriction enzyme and; (c) electrophoresing the digested aggregate of cDNAs in separate lanes. The method can be used to analyse gene expression rapidly and easily
XX	
SQ	Sequence 21 BP; 2 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
	Query Match 0.6%; Score 17.8; DB 1; Length 21; Best Local Similarity 90.5%; Pred. No. 9.6e+02; Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	2706 ACTTAAAAAATAAAAAAAAAAAAA 2726
Db	21 ATTCAAAAAATAAAAAAAAAAAAA 1
RESULT 1194	
AAQ75639/c	
ID	AAQ75639 standard; DNA; 21 BP.
XX	
AC	AAQ75639;
DT	04-AUG-1995 (first entry)
DE	Reverse transcription primer used in cDNA analysis technique.
XX	
KW	Analysis; gene expression; reverse transcription; primer; cDNA; aggregate; restriction enzyme; ss.
OS	Synthetic.
FN	JP06303997-A.
XX	
PD	01-NOV-1994.
XX	
PF	16-APR-1993; 93JP-00112515.
PS	Disclosure; Page 8; 11pp; Japanese.
XX	
CC	A method for the analysis of cDNA comprises (a) preparing an aggregate of double-stranded cDNAs by using an aggregate of mRNAs and a plural type of labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798) and using the aggregate of mRNAs as the template for each reverse transcription primer; (b) digesting each of the prepared aggregates of the double-stranded cDNAs with restriction enzyme and; (c) electrophoresing the digested aggregate of cDNAs in separate lanes. The method can be used to analyse gene expression rapidly and easily
XX	
SQ	Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
	Query Match 0.6%; Score 17.8; DB 1; Length 21; Best Local Similarity 90.5%; Pred. No. 9.6e+02; Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	2707 CTAAAAAATAAAAAAAAAAAAAA 2727
Db	21 CTCGAAAAAAAAAAAAAAAAAAAA 1


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XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XX
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 6; 11pp; Japanese.
XX XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX XX
XX SQ Sequence 21 BP; 0 A; 0 C; 3 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2707 CTAAGAAAAAAGAAAAAAGAAAAA 2727
DB 21 CCACAAAAAAGAAAAAAGAAAAA 1

RESULT 1195
AAQ75780/c
ID AAQ75780 standard; DNA; 21 BP.
XX
AC AAQ75780;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2707 CTAAAGAAAAAAGAAAAAAGAAAAA 2727
DB 21 CCACAAAAAAGAAAAAAGAAAAA 1

RESULT 1195
AAQ75780/c
ID AAQ75780 standard; DNA; 21 BP.
XX
AC AAQ75780;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2709 AAAAGAAAAAAGAAAAAAGAAAAA 2729
DB 21 AGAGAAAAAAGAAAAAAGAAAAA 1

RESULT 1197
AAQ75793/c
ID AAQ75793 standard; DNA; 21 BP.
XX
AC AAQ75793;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
XX

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SQ Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2708 TAAAGAAAAAAGAAAAAAGAAAAA 2728
DB 21 TGAGAAAAAAGAAAAAAGAAAAA 1

RESULT 1196
AAQ75781/c
ID AAQ75781 standard; DNA; 21 BP.
XX
AC AAQ75781;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
XX
XX Query Match 0.6%; Score 17.8; DB 1; Length 21;
XX Best Local Similarity 90.5%; Pred. No. 9.6e+02;
XX Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 2709 AAAAGAAAAAAGAAAAAAGAAAAA 2729
DB 21 AGAGAAAAAAGAAAAAAGAAAAA 1

RESULT 1197
AAQ75793/c
ID AAQ75793 standard; DNA; 21 BP.
XX
AC AAQ75793;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
XX

```

KW Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.

XX Synthetic.

PN JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX Disclosure; Page 9; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 0 A; 2 C; 0 G; 19 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;

Best Local Similarity 90.5%; Pred. No. 9.6e+02;

Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729

Db 21 AAGGAAAAAAAAAAAAAAAAAAAA 1

RESULT 1198

AAQ75614/c

ID AAQ75614 standard; DNA; 21 BP.

XX AC AAQ75614;

XX 04-AUG-1995 (first entry)

DE Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX Disclosure; Page 6; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match

Best Local Similarity 90.5%; Score 17.8; DB 1; Length 21;

Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2704 GTACTAAAAAAAAAAAAAAAAAAAA 2724

Db 21 GTCCAAAAAAAAAAAAAAAAAAAA 1

RESULT 1199

AAQ75652/c

ID AAQ75652 standard; DNA; 21 BP.

XX AC AAQ75652;

XX 04-AUG-1995 (first entry)

DE Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX Disclosure; Page 6; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match

Best Local Similarity 90.5%; Score 17.8; DB 1; Length 21;

Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAAAAAA 2728

Db 21 TGACAAAAAAAAAAAAAAAAAAAA 1

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RESULT 1200
AAQ75665/C
ID AAQ75665 standard; DNA; 21 BP.
XX
AC AAQ75665;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 7; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
DB 21 AAGCAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1201
AAQ7567/C
ID AAQ7567 standard; DNA; 21 BP.
XX
AC AAQ7567;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2727
DB 21 CCAGAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1202
AAQ75612/C
ID AAQ75612 standard; DNA; 21 BP.
XX
AC AAQ75612;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 0 C; 2 G; 17 T; 0 U; 0 Other;

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CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 0 C; 3 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2705 TACTAAAAA 2725
Db 21 TCCCAAAAAA 1
RESULT 1206
AAQ75659/c
ID AAQ75659 standard; DNA; 21 BP.
XX AC AAQ75659;
XX DT 04-AUG-1995 (first entry)
XX DB Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX PS Disclosure; Page 6; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2707 CTAAAAA 2727
Db 21 CTGCAAAAAA 1
RESULT 1207
AAQ75659/c
ID AAQ75659 standard; DNA; 21 BP.
XX AC AAQ75659;
XX DT 04-AUG-1995 (first entry)
XX DB Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX PS Disclosure; Page 6; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2707 TACTAAAAA 2725
Db 21 TCCCAAAAAA 1

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AAQ75740/c
ID AAQ75740 standard; DNA; 21 BP.
XX AC AAQ75740;
XX DT 04-AUG-1995 (first entry)
XX DB Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX PS Disclosure; Page 8; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2705 TACTAAAAA 2725
Db 21 TCCCAAAAAA 1
RESULT 1208
AAQ75769/c
ID AAQ75769 standard; DNA; 21 BP.
XX AC AAQ75769;
XX DT 04-AUG-1995 (first entry)
XX DB Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.

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XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX PT
XX DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 9; 1lpp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 1 C; 1 G; 19 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2706 ACTAAAAAAAAAAAAAAAAAAAAA 2726
DB 21 ACAGAAAAAAAAAAAAAAAAAAAAA 1
RESULT 1209
AAQ75779/c
ID AAQ75779 standard; DNA; 21 BP.
XX AC
XX AAQ75779;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX XX JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 8; 1lpp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
DB 21 TATGAAAAAAAAAAAAAAAAAAAAA 1
RESULT 1211
AAQ75632/c
ID AAQ75632 standard; DNA; 21 BP.
XX AC
XX AAQ75632;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.

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Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2707 CTAAAAAAAAAAAAAAAAAAAAA 2727
DB 21 CGAGAAAAAAAAAAAAAAAAAAAAA 1
RESULT 1210
AAQ75760/c
ID AAQ75760 standard; DNA; 21 BP.
XX AC
XX AAQ75760;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 8; 1lpp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 0 G; 18 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2705 TACTAAAAAAAAAAAAAAAAAAAA 2725
DB 21 TATGAAAAAAAAAAAAAAAAAAAAA 1
RESULT 1211
AAQ75632/c
ID AAQ75632 standard; DNA; 21 BP.
XX AC
XX AAQ75632;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.

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ID AAQ75785 standard; DNA; 21 BP.
XX
AC AAQ75785;
XX
XX
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2726
Db 21 ACGGAAAAA 1

RESULT 1215
AAQ75637/c
ID AAQ75637 standard; DNA; 21 BP.
XX
XX AAQ75637;
XX
XX
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2726
Db 21 ACGGAAAAA 1

RESULT 1216
AAQ75768/c
ID AAQ75768 standard; DNA; 21 BP.
XX
XX AAQ75768;
XX
XX
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2726
Db 21 AGTCAAAAAA 1

RESULT 1216
AAQ75768/c
ID AAQ75768 standard; DNA; 21 BP.
XX
XX AAQ75768;
XX
XX
DT 04-AUG-1995 (first entry)
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2726
Db 21 ACGGAAAAA 1

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Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAAAAAA 2728
Db 21 TCAGAAAAAATAAAAAAAAAAAAA 1

RESULT 1217
AAQ75640/c
ID AAQ75640 standard; DNA; 21 BP.
XX AC AAQ75640;
XX AC
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX XX
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 6; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2704 GTACTTAAAAAATAAAAAAAAA 2724
Db 21 GTGCAAAAAAATAAAAAAAAAA 1

RESULT 1219
AAQ75755/c
ID AAQ75755 standard; DNA; 21 BP.
XX AC AAQ75755;
XX AC
XX DT 04-AUG-1995 (first entry)
XX XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX XX
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PS (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 8; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAAAAAA 2728
Db 21 TCACAAAAAATAAAAAAAAAAAAA 1

RESULT 1218
AAQ75662/c
ID AAQ75662 standard; DNA; 21 BP.
XX AC AAQ75662;
XX AC
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX XX

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OS Synthetic.
XX JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 6; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2704 GTACTTAAAAAATAAAAAAAAA 2724
Db 21 GTGCAAAAAAATAAAAAAAAAA 1

RESULT 1219
AAQ75755/c
ID AAQ75755 standard; DNA; 21 BP.
XX AC AAQ75755;
XX AC
XX DT 04-AUG-1995 (first entry)
XX XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX XX
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 8; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of

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ID AAQ75761 standard; DNA; 21 BP.

KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
KW graft versus host disease; malignant cell removal; bone marrow; ss.
XX
OS Homo sapiens.
PN WO9841648-A2.
XX
XX 24-SEP-1998.
PD
XX 19-MAR-1998; 98WO-US005419.
PF
XX 20-MAR-1997; 97US-0041057P.
PR
XX (VARI-) VARIAGENTS INC.
PA
XX Houseman D, Ledley FD, Stanton VP;
PI
XX WPI; 1998-521232/44.
DR
XX Identifying target genes for allele-specific drugs - used for diagnosis,
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
PT dysplastic lesions, endometriosis or graft versus host disease.
XX
XX Disclosure; Fig 7; 605pp; English.
PS
XX This invention describes a novel method for identifying an inhibitor
CC potentially useful for treatment of cancer, where the inhibitor is active
CC on a gene vital for cell growth or viability, and where the gene is
CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
CC used for preventing the development of cancer in a patient having a
CC precancerous condition, by administering to the patient a first allele
CC specific inhibitor (ASI) targeted to an allele of a first essential gene
CC present in cells of the precancerous condition, where the normal somatic
CC cells of the patient are heterozygous for the first gene, the inhibitor
CC is active on at least one but less than all allelic forms of the gene
CC present in a population and targets only one allelic form present in the
CC normal somatic cells, and the first gene. The products and methods can be
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
CC graft versus host disease. The method can also be used to remove
CC malignant cells from bone marrow transplants. AAZ25812-226825 represent
CC human polymorphic sites described in the method of the invention
XX
XX Sequence 21 BP; 19 A; 1 C; 1 G; 0 T; 0 U; 0 Other;
SQ

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAAAAAA 2729
Db 1 AACAAAGAAAAAAAAAAAAAAAAA 21

RESULT 1226
ACL53469/c
ID ACL53469 standard; RNA; 21 BP.
XX
XX ACL53469;
AC
XX
XX 24-MAR-2005 (first entry)
DT
XX
XX TRPM4 siRNA antisense sequence, SEQ ID 14541.
DE
XX
XX Cytostatic; Gene therapy; Vaccine; RNA Interference; cancer; ss;
KW short interfering RNA; Gene silencing.
XX
XX Synthetic.
OS
XX WO2005001092-A2.
PN
XX 06-JAN-2005.
PD

XX 19-MAY-2004; 2004WO-US015645.
PF
XX 20-MAY-2003; 2003US-0471729P.
PR
XX (AMHP) WYETH.
PA
XX
XX Be X, Wei L, Slonim DK, Howes SH;
PI
XX WPI; 2005-075568/08.
DR
XX Pharmaceutical composition comprising an agent capable of modulating an
PT expression level or protein activity of a gene, e.g. ABCc4, or a T cell
PT activated by the polypeptide or antibody, and a carrier, useful for
PT treating cancer.
PT
XX Claim 3; SEQ ID NO 14541; 113pp; English.
PS
XX The present invention relates to a novel pharmaceutical composition
CC comprising: (a) an agent capable of modulating an expression level or
CC protein activity of a cancer-related transmembrane protein (CRTP) or gene
CC ; an antibody specific for a CRTP, or a T cell activated by a CRTP; and
CC (b) a carrier. The pharmaceutical composition may also comprise a
CC polynucleotide capable of inhibiting or decreasing the expression of the
CC CRTP by RNA interference or an antisense mechanism. The CRTPs of the
CC invention are selected from ABCc4, C20orf103, CACNA1D, CDH6, CST, ENPP3,
CC FLJ11856, GPR54, HAVCR1, SLC6A3, SLC30A4, TRG, and TRPM4. The
CC pharmaceutical composition is useful for treating cancer, e.g. colon
CC cancer, lung cancer, breast cancer, prostate cancer, liver cancer, kidney
CC cancer, stomach cancer, and esophageal cancer. The present sequence is a
CC CRTP short interfering RNAs (siRNA) oligonucleotide. Note: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 21 BP; 7 A; 6 C; 6 G; 0 T; 2 U; 0 Other;
SQ

Query Match 0.6%; Score 17.8; DB 1; Length 21;
Best Local Similarity 90.5%; Pred. No. 9.6e+02;
Matches 19; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2120 AACCTGGAGGCTTGGCCTTG 2140
Db 21 AACCTGGTGGCTTGTGCTTG 1

RESULT 1227
AAT69640/c
ID AAT69640 standard; DNA; 19 BP.
XX
XX AAT69640;
AC
XX
XX 20-FEB-1998 (first entry)
DT
XX
XX Telomerase Oligo-dT-Primer P3.
DE
XX
XX Telomerase; substrate; primer; detection; 5'-region; retrovirus;
KW long terminal repeat 2; LTR-2; diagnosis; tumour; screening;
KW effector compound; PCR; amplification; Oligo-dT-Primer; ss.
XX
XX Synthetic.
OS
XX DE19644302-A1.
PN
XX 05-JUN-1997.
PD
XX
XX 24-OCT-1996; 96DE-01044302.
PF
XX
XX 28-NOV-1995; 95DE-01044317.
PR
XX (BOEF) BOEHRINGER MANNHEIM GMBH.
PA
XX Emrich T, Leying H, Hinzpeter M, Karl G;
PI

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XX WPI; 1997-299542/28.
XX
XX Measuring telomerase activity, useful for tumour diagnosis and compound
PT screening - by extending substrate primer, followed by amplification and
PT immobilising product for detection.
XX
XX Example; Page 11; 21pp; German.
XX
XX The present sequence is a telomerase Oligo-dT-Primer, which can be used
CC in a novel method for detecting telomerase activity. The method comprises
CC adding to a test sample a 1st primer, that serves as telomerase
CC substrate, and nucleoside triphosphate (dNTP) and incubating to allow
CC primer extension by the telomerase, amplifying the extension product,
CC immobilising the amplification product (AP) on a solid phase and
CC qualitative and/or quantitative detection of AP, where the substrate
CC primer is preferably from the 5'-region of the long terminal repeat 2
CC (LTR-2) sequence of a retrovirus. The method can be used to diagnose
CC tumours and screen compounds for effector activity. Immobilisation of AP
CC provides a signal that is reproducibly representative of telomerase
CC activity, eliminates the need for gel electrophoretic separation and
CC provides high sensitivity. Radioactive labels are not required and the
CC method can be automated for routine use. Specific detection is achieved
CC by proper choice of hybridisation conditions, without separation of the
CC telomerase extension product. A specific signal is generated by 1-10 cell
CC equivalents, but for tumour analysis 10-1000 ng of tissue is usually used
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 2 Other;
XX
XX Query Match 0.6%; Score 17.6; DB 1; Length 19;
XX Best Local Similarity 94.4%; Pred. No. 9.4e+02;
XX Matches 17; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY * 2708 TAAAAAATAAAAAAAAAA 2725
XX :|||||
XX Db 18 KAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1228
XX AAQ75549/c
XX ID AAQ75549 standard; DNA; 19 BP.
XX AC AAQ75549;
XX
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 1 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 19;
XX Best Local Similarity 94.7%; Pred. No. 9.7e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAAAAAAA 2726
XX :|||||
XX Db 19 TCAAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1230
XX AAQ75556/c
XX ID AAQ75556 standard; DNA; 19 BP.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)

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CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 0 A; 0 C; 1 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 19;
XX Best Local Similarity 94.7%; Pred. No. 9.7e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2706 ACTAAAAAATAAAAAAAAAA 2724
XX :|||||
XX Db 19 ACAAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1229
XX AAQ75548/c
XX ID AAQ75548 standard; DNA; 19 BP.
XX AC AAQ75548;
XX
XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 1 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 19;
XX Best Local Similarity 94.7%; Pred. No. 9.7e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAAAAAAA 2726
XX :|||||
XX Db 19 TCAAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1230
XX AAQ75556/c
XX ID AAQ75556 standard; DNA; 19 BP.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)

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AC AAQ75556;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 1 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 19;
XX Best Local Similarity 94.7%; Pred. No. 9.7e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726
DB 19 TGAATAAAAAAAAAAAAAAAAA 1

RESULT 1231
AAQ75547/c
ID AAQ75547 standard; DNA; 19 BP.
XX
XX AAQ75547;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 1 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 19;
XX Best Local Similarity 94.7%; Pred. No. 9.7e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2725
DB 19 CCATAAAAAAAAAAAAAAAAAA 1

RESULT 1232
AAQ75555/c
ID AAQ75555 standard; DNA; 19 BP.
XX
XX AAQ75555;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 0 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 19;
XX Best Local Similarity 94.7%; Pred. No. 9.7e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2725
DB 19 CCATAAAAAAAAAAAAAAAAAA 1

RESULT 1232
AAQ75555/c
ID AAQ75555 standard; DNA; 19 BP.
XX
XX AAQ75555;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 0 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 19;
XX Best Local Similarity 94.7%; Pred. No. 9.7e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy 2707 CTAAAAA.....AAAAA 2725
Db 19 CGAAAAA.....AAAAA 1

RESULT 1233
AAQ75557/C
ID AAQ75557 standard; DNA; 19 BP.
XX
XX AAQ75557;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 19 BP; 0 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 9.7e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAA.....AAAAA 2727
Db 19 AGAAAAA.....AAAAA 1

RESULT 1234
ABK94423/C
ID ABK94423 standard; DNA; 19 BP.
XX
XX ABK94423;
XX
XX 27-AUG-2002 (first entry)
XX
XX Human MLH1 DNA mismatch repair gene, exon 12, PCR primer 12.1F.
XX
XX hMLH1; DNA mismatch repair; BRCA1; ss; PCR; primer; BRCA1;
XX breast and ovarian cancer susceptibility gene; TGDS; human;
XX two-dimensional DNA electrophoresis; tumour suppressor gene;
XX breast cancer; ovarian cancer; tumour.
XX

OS Homo sapiens.
XX WO200236819-A1.
XX
XX 10-MAY-2002.
XX
XX 06-NOV-2000; 2000WO-IB001607.
XX
XX 06-NOV-2000; 2000WO-IB001607.
XX
XX (SCSC-) ACAD APPLIED SCI.
XX
XX Vijg J;
XX
XX WPI; 2002-471507/50.
XX
XX Detecting mutations in the BRCA1 and hMLH1 gene comprises subjecting
XX amplification products to 2-dimensional gel electrophoresis to produce a
XX characteristic spot pattern for a specific mutation in either the BRCA1
XX or the hMLH1 gene.
XX
XX Claim 6; Page 21; 57pp; English.
XX
XX The invention relates to detecting mutations in the BRCA1 and hMLH1 gene
XX comprising subjecting a set of amplification products to two-dimensional
XX DNA electrophoresis (TGDS) to produce a characteristic spot pattern for a
XX specific mutation in either the BRCA1 or the hMLH1 gene. Also included
XX are test kits for enabling BRCA1 or hMLH1 gene testing comprising short
XX PCR primers given in the specification, mixed in 20 mM of Tris-HCl, 50 mM
XX KCl, 25 micro M of dNTP, and 5 % formamide. The method is useful for
XX detecting mutations in the BRCA1 (breast and ovarian cancer
XX susceptibility gene, a tumour suppressor gene) and hMLH1 gene (a DNA
XX mismatch repair gene). The present sequence is a PCR primer specific to
XX hMLH1 used in the method of the invention
XX
XX Sequence 19 BP; 4 A; 1 C; 0 G; 14 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 9.7e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2703 TGTACTAAAAA.....AAAAA 2721
Db 19 TGTATTAAAAA.....AAAAA 1

RESULT 1235
AAQ75566/C
ID AAQ75566 standard; DNA; 20 BP.
XX
XX AAQ75566;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX

```

PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.

XX Disclosure; Page 5; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily

XX Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726
DB 19 TCAAAAAAAAAAAAAAAAAA 1

RESULT 1236
AAQ75591/c
ID AAQ75591 standard; DNA; 20 BP.

XX AAQ75591;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

DE Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.

XX Disclosure; Page 5; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily

XX Sequence 20 BP; 0 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAA 2725

DB 19 CGAAAAAATAAAAAAAAAA 1

RESULT 1237

AAQ75598/c

ID AAQ75598 standard; DNA; 20 BP.

XX AAQ75598;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

DE Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.

XX Disclosure; Page 5; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily

XX Sequence 20 BP; 1 A; 2 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726

DB 19 TCAAAAAAAAAAAAAAAAAA 1

RESULT 1238

AAQ75559/c

ID AAQ75559 standard; DNA; 20 BP.

XX AAQ75559;

XX 04-AUG-1995 (first entry)

XX Reverse transcription primer used in cDNA analysis technique.

DE Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.


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PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 0 C; 3 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2725
Db 19 CCAAAAAA 1

RESULT 1239
AAQ75570/c
ID AAQ75570 standard; DNA; 20 BP.
XX
AC AAQ75570;
XX
XX 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; Gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
XX JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 0 C; 3 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2725
Db 19 CCAAAAAA 1

RESULT 1239
AAQ75570/c
ID AAQ75570 standard; DNA; 20 BP.
XX
AC AAQ75570;
XX
XX 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; Gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
XX JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 0 C; 3 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2725
Db 19 CCAAAAAA 1

RESULT 1239
AAQ75570/c
ID AAQ75570 standard; DNA; 20 BP.
XX
AC AAQ75570;
XX
XX 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; Gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
XX JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 0 C; 3 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2725
Db 19 CCAAAAAA 1

RESULT 1241
AAQ75560/c
ID AAQ75560 standard; DNA; 20 BP.
XX
AC AAQ75560;
XX
XX 04-AUG-1995 (first entry)
XX

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CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2724
Db 19 ACAAAAAA 1

RESULT 1240
AAQ75596/c
ID AAQ75596 standard; DNA; 20 BP.
XX
AC AAQ75596;
XX
XX 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; Gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
XX JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 2 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAA 2726
Db 19 TGA AAAA 1

RESULT 1241
AAQ75560/c
ID AAQ75560 standard; DNA; 20 BP.
XX
AC AAQ75560;
XX
XX 04-AUG-1995 (first entry)
XX

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Db      19 CGAAAAAAAAAAAAAAAAAAAA 1

RESULT 1244
AAQ75564/C
ID      AAQ75564 standard; DNA; 20 BP.
XX
XX
AC      AAQ75564;
XX
XX      04-AUG-1995 (first entry)
DT
DE
DE
XX      Reverse transcription primer used in cDNA analysis technique.
XX
KW      Analysis; gene expression; reverse transcription; primer; cDNA;
KW      aggregate; restriction enzyme; ss.
OS
OS
XX      JP06303997-A.
PN
XX
XX      01-NOV-1994.
PD
XX
XX      16-APR-1993; 93JP-00112515.
PF
XX
XX      16-APR-1993; 93JP-00112515.
PR
XX
XX      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX      WPI; 1995-018287/03.
DR
XX
XX      Analysis of cDNA and gene expression - by amplification of mRNA followed
PT      by digestion with restriction enzymes.
PT
XX
PS      Disclosure; Page 5; 11pp; Japanese.
PS
CC      A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC      double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC      labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC      and using the aggregate of mRNAs as the template for each reverse
CC      transcription primer; (b) digesting each of the prepared aggregates of
CC      the double-stranded cDNAs with restriction enzyme and; (c)
CC      electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC      method can be used to analyse gene expression rapidly and easily
XX
SQ      Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;

Query Match      0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      2708 TAAAAAAAAAAAAAAAAAAAAA 2726
      | | | | | | | | | | | | | | | |
Db      19 TCAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1245
AAQ75565/C
ID      AAQ75565 standard; DNA; 20 BP.
XX
XX
AC      AAQ75565;
XX
XX      04-AUG-1995 (first entry)
DT
DE
DE
XX      Reverse transcription primer used in cDNA analysis technique.
XX
KW      Analysis; gene expression; reverse transcription; primer; cDNA;
KW      aggregate; restriction enzyme; ss.
OS
OS
XX      JP06303997-A.
PN
XX
XX      01-NOV-1994.
PD
XX
XX
SQ      Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;

Query Match      0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      2708 TAAAAAAAAAAAAAAAAAAAAA 2726
      | | | | | | | | | | | | | | | |
Db      19 TCAAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1246
AAQ75562/C
ID      AAQ75562 standard; DNA; 20 BP.
XX
XX
AC      AAQ75562;
XX
XX      04-AUG-1995 (first entry)
DT
DE
DE
XX      Reverse transcription primer used in cDNA analysis technique.
XX
KW      Analysis; gene expression; reverse transcription; primer; cDNA;
KW      aggregate; restriction enzyme; ss.
OS
OS
XX      JP06303997-A.
PN
XX
XX      01-NOV-1994.
PD
XX
XX      16-APR-1993; 93JP-00112515.
PF
XX
XX      16-APR-1993; 93JP-00112515.
PR
XX
XX      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX      WPI; 1995-018287/03.
DR
XX
XX      Analysis of cDNA and gene expression - by amplification of mRNA followed
PT      by digestion with restriction enzymes.
PT
XX
PS      Disclosure; Page 5; 11pp; Japanese.
PS
CC      A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC      double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC      labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC      and using the aggregate of mRNAs as the template for each reverse
CC      transcription primer; (b) digesting each of the prepared aggregates of
CC      the double-stranded cDNAs with restriction enzyme and; (c)
CC      electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC      method can be used to analyse gene expression rapidly and easily
XX
SQ      Sequence 20 BP; 1 A; 0 C; 1 G; 18 T; 0 U; 0 Other;

Query Match      0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy      2708 TAAAAAAAAAAAAAAAAAAAAA 2726
      | | | | | | | | | | | | | | | |
Db      19 TCAAAAAAAAAAAAAAAAAAAAAA 1

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CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match      0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2725
Db 19 CCAAAAAAAAAAAAAAAAAA 1

RESULT 1247
AAQ75602/c
ID AAQ75602 standard; DNA; 20 BP.
XX
AC AAQ75602;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

Query Match      0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 19 AGAAAAAAAAAAAAAAAAA 1

RESULT 1248
AAQ75567/c
ID AAQ75567 standard; DNA; 20 BP.
XX
AC AAQ75567;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.

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DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 0 C; 2 G; 18 T; 0 U; 0 Other;

Query Match      0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAATAAAAAAAAAA 2724
Db 19 ACAAAAAAAAAAAAAAAAAA 1

RESULT 1249
AAQ75592/c
ID AAQ75592 standard; DNA; 20 BP.
XX
AC AAQ75592;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.

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XX PS Disclosure; Page 5; 1lpp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2707 CTAAGAAAAAAGAAAAA 2725
DB 19 CGAAAAAAGAAAAA 1
RESULT 1250
AAQ75599/c
ID AAQ75599 standard; DNA; 20 BP.
XX AC AAQ75599;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; Gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 5; 1lpp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2709 AAAAAAAGAAAAA 2727
DB 19 AGAAAAAAGAAAAA 1

```

RESULT 1251

AAF99943

XX AAF99943 standard; DNA; 20 BP.

XX AAF99943;

AC AAF99943;

XX 12-JUL-2001 (first entry)

DT 12-JUL-2001 (first entry)

XX Synthetic oligonucleotide #9.

DE Synthetic oligonucleotide #9.

XX Oligonucleotide purification; liquid chromatography;

KW hydrophobic protective group; deprotection; ds.

XX Synthetic.

OS Synthetic.

PN JP2000342265-A.

XX 12-DEC-2000.

PD 12-DEC-2000.

XX 02-JUN-1999; 99JP-00154974.

PF 02-JUN-1999; 99JP-00154974.

XX 02-JUN-1999; 99JP-00154974.

PR 02-JUN-1999; 99JP-00154974.

XX (TOAG) TOA GOSHI CHEM IND LTD.

PA (TOAG) TOA GOSHI CHEM IND LTD.

XX WPI; 2001-268251/28.

DR WPI; 2001-268251/28.

XX A process for purification of oligonucleotides using liquid

PT chromatography.

XX Example 1; Page 4; 13pp; Japanese.

PS Example 1; Page 4; 13pp; Japanese.

XX The present sequence is an oligonucleotide provided in a specification

CC relating to the simplified purification of oligonucleotides by liquid

CC chromatography. The process comprises: (a) pouring oligonucleotides

CC protected with a hydrophobic group and oligonucleotide with no protective

CC group into a liquid chromatography column packed with an acid and alkali

CC resistant packing agent, such as polystyrene resin; (b) pouring a mixed

CC developing solvent composed of a buffer made from a volatile salt and a

CC water soluble organic solvent at a suitable concentration gradient into

CC the column; (c) pouring an acid, particularly 6-16 v/v% acetic acid, into

CC the column to deprotect the oligonucleotides protected with the

CC hydrophobic group; (d) pouring a mixed developing solvent composed of a

CC buffer made from a volatile salt, particularly 0.05-0.5 N aqueous

CC ammonium hydrogencarbonate solution adjusted at pH 8-10, and a water

CC soluble organic solvent at a suitable concentration gradient to elute the

CC deprotected oligonucleotides; and (e) removal of the solvent and the salt

CC from the eluted oligonucleotides

XX Sequence 20 BP; 17 A; 1 C; 1 G; 1 T; 0 U; 0 Other;

SQ Sequence 20 BP; 17 A; 1 C; 1 G; 1 T; 0 U; 0 Other;

Query Match

Best Local Similarity 0.6%; Score 17.4; DB 1; Length 20;

Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAGAAAAA 2726

DB 1 TAAAAAAGAAAAA 19

RESULT 1252

ABK48094/c

XX ABK48094 standard; DNA; 20 BP.

XX ABK48094;

AC ABK48094;

XX 15-JUL-2002 (first entry)

DT 15-JUL-2002 (first entry)

XX Human dendritic cell wall membrane molecule-associated primer #2.

DE Human dendritic cell wall membrane molecule-associated primer #2.

XX Human; cancer; autoimmune disease; organ transplantation; infection;

KW Human; cancer; autoimmune disease; organ transplantation; infection;

KW allergy; vaccine; dendritic cell therapy; immune response; primer; ss;
 KW dendritic cell wall membrane molecule; immunogenic.
 XX Homo sapiens.
 OS WO200222683-A1.
 PN
 XX
 XX 21-MAR-2002.
 PD
 XX 12-SEP-2001; 2001WO-JP007919.
 PF
 XX 12-SEP-2000; 2000JP-00277352.
 PR
 XX (KIRI) KIRIN BEER KK.
 PA
 XX Watarai H, Yamaguchi Y, Hinohara A, Nakagawa R, Ehara H, Imai N;
 PI WPI; 2002-362337/39.
 XX
 XX Isolated dendritic cell wall membrane, variants and their encoded DNAs,
 PT useful in producing antibodies and soluble molecules to separate or
 PT detect dendritic cells, and for treatment of cancer, autoimmune diseases
 PT and infection.
 XX
 XX Example 6; Page 20; 68pp; Japanese.
 PS
 XX The invention relates to an isolated human dendritic cell wall membrane
 CC molecule comprising a defined amino acid sequence given in the
 CC specification, or its variant based on the amino acid sequence but with
 CC some amino acids deleted, substituted, inserted and/or added and capable
 CC of controlling immune response. The protein, variants and encoded DNAs
 CC are useful in producing antibodies and soluble molecules to separate or
 CC detect dendritic cells, and for treatment of cancer, autoimmune diseases,
 CC organ transplantation, infection and allergy, e.g. by cancer vaccines and
 CC dendritic cell therapy to control immune response through promotion or
 CC suppression of the interaction between dendritic cells and T cells. The
 CC human dendritic cell wall membrane increases expression with maturation
 CC of human dendritic cells. The present sequence represents a human
 CC dendritic cell wall membrane molecule-associated primer
 XX
 XX Sequence 20 BP; 3 A; 6 C; 7 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17.4; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 9.9e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2094 ACCCGTGTGCAGCAGCA 2112
 Db 20 ACCCGTGTGCAGCAGCA 2
 |||||
 RESULT 1253
 ABK48093
 ID ABK48093 standard; DNA; 20 BP.
 XX
 XX ABK48093;
 AC
 XX
 XX 15-JUL-2002 (first entry)
 DT
 XX Human dendritic cell wall membrane molecule-associated primer #1.
 DE
 XX
 XX Human; cancer; autoimmune disease; organ transplantation; infection;
 KW allergy; vaccine; dendritic cell therapy; immune response; primer; ss;
 KW dendritic cell wall membrane molecule; immunogenic.
 KW
 XX Homo sapiens.
 OS
 XX WO200222683-A1.
 PN
 XX 21-MAR-2002.
 PD
 XX 12-SEP-2001; 2001WO-JP007919.
 PF
 XX

PR 12-SEP-2000; 2000JP-00277352.
 XX (KIRI) KIRIN BEER KK.
 PA
 XX Watarai H, Yamaguchi Y, Hinohara A, Nakagawa R, Ehara H, Imai N;
 PI WPI; 2002-362337/39.
 XX
 XX Isolated dendritic cell wall membrane, variants and their encoded DNAs,
 PT useful in producing antibodies and soluble molecules to separate or
 PT detect dendritic cells, and for treatment of cancer, autoimmune diseases
 PT and infection.
 XX
 XX Example 6; Page 20; 68pp; Japanese.
 PS
 XX The invention relates to an isolated human dendritic cell wall membrane
 CC molecule comprising a defined amino acid sequence given in the
 CC specification, or its variant based on the amino acid sequence but with
 CC some amino acids deleted, substituted, inserted and/or added and capable
 CC of controlling immune response. The protein, variants and encoded DNAs
 CC are useful in producing antibodies and soluble molecules to separate or
 CC detect dendritic cells, and for treatment of cancer, autoimmune diseases,
 CC organ transplantation, infection and allergy, e.g. by cancer vaccines and
 CC dendritic cell therapy to control immune response through promotion or
 CC suppression of the interaction between dendritic cells and T cells. The
 CC human dendritic cell wall membrane increases expression with maturation
 CC of human dendritic cells. The present sequence represents a human
 CC dendritic cell wall membrane molecule-associated primer
 XX
 XX Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17.4; DB 1; Length 20;
 Best Local Similarity 94.7%; Pred. No. 9.9e+02;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2094 ACCCGTGTGCAGCAGCA 2112
 Db 1 ACCCGTGTGCAGCAGCA 19
 |||||
 RESULT 1254
 ABZ85534
 ID ABZ85534 standard; DNA; 20 BP.
 XX
 XX ABZ85534;
 AC
 XX
 XX 17-OCT-2003 (first entry)
 DT
 XX Human oligonucleotide sequence.
 DE
 XX
 XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; anti-allergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 KW
 XX Homo sapiens.
 OS
 XX WO200285308-A2.
 PN
 XX 31-OCT-2002.
 PD
 XX 23-APR-2002; 2002WO-US013135.
 PF
 XX 24-APR-2001; 2001US-0286137P.
 PR
 XX (EPIC-) EPIGENESIS PHARM INC.
 PA
 XX Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 XX

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 776; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2727
Db 1 AAAAAAAAAAAAAAAAAAAAAA 19

RESULT 1255
ABZ89487
ID ABZ89487 standard; DNA; 20 BP.
XX
AC ABZ89487;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 4729; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 18 A; 2 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2706 ACTAAAAAAAAAAAAAAAAAAAA 2724
Db 2 ACCAAAAAAAAAAAAAAAAAAAAA 20

RESULT 1256
ABZ92865
ID ABZ92865 standard; DNA; 20 BP.
XX
AC ABZ92865;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
XX WO200285308-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (SPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 8107; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antinflammatory steroid and ubiquinone. A composition of the invention
CC has antinflammatory, anti-allergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of adenosine or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 18 A; 0 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAATTTTTTTTTT 2724
| TTTTTTTTTTTTTTTTTT
Db 2 AGTAAAAAATTTTTTTTTT 20

RESULT 1257
ABZ88938
ID ABZ88938 standard; DNA; 20 BP.
XX
AC ABZ88938;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antinflammatory steroid; ubiquinone; antinflammatory; anti-allergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
DR

XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 4180; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antinflammatory steroid and ubiquinone. A composition of the invention
CC has antinflammatory, anti-allergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 17 A; 1 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATTTTTTTTTT 2726
| TTTTTTTTTTTTTTTTTT
Db 2 TCATAAAAAATTTTTTTTTT 20

RESULT 1258
ABZ89872
ID ABZ89872 standard; DNA; 20 BP.
XX
AC ABZ89872;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antinflammatory steroid; ubiquinone; antinflammatory; anti-allergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
DR

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 5114; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 20 BP; 16 A; 2 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;

Best Local Similarity 94.7%; Pred. No. 9.9e+02;

Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2707 CTAAAAAATAAAAAAAAAA 2725

Db 1 CTCAAAAAATAAAAAAAAAA 19

RESULT 1259

ABD26102

ID ABD26102 standard; DNA; 20 BP.

AC ABD26102; ;

XX 29-JUL-2004 (first entry)

DT 29-JUL-2004 (first entry)

DE AA463249-derived oligonucleotide SEQ ID 5114.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;

XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;

XX analgesic; hypotensive; immunosuppressive; cycostatic; cystic fibrosis;

XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

XX pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

OS WO200285309-A2.

PN 31-OCT-2002.

PD 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIG-) EPIGENESIS PHARM INC.

PA Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 5114; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX Sequence 20 BP; 16 A; 2 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;

Best Local Similarity 94.7%; Pred. No. 9.9e+02;

Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2707 CTAAAAAATAAAAAAAAAA 2725

Db 1 CTCAAAAAATAAAAAAAAAA 19

RESULT 1260

ABD21764

ID ABD21764 standard; DNA; 20 BP.

XX ABD21764;

AC ABD21764;

XX 29-JUL-2004 (first entry)

DT 29-JUL-2004 (first entry)

DE Human stannocalcin-derived oligo SEQ ID 776.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;

XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;

XX analgesic; hypotensive; immunosuppressive; cycostatic; cystic fibrosis;

XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

XX pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.

OS

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PN WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPTG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 776; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC pulmonary obstruction, and/or surfactant hypoproduction and/or lung
CC inflammation, allergies and/or bronchoconstriction and/or lung
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 20;
XX Best Local Similarity 94.7%; Pred. No. 9.9e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727
Db 1 AAAAAAAAAAAAAAAAAA 19

RESULT 1261
ID ABD25717 standard; DNA; 20 BP.
XX
XX ABD25717;
XX
XX 29-JUL-2004 (first entry)
XX
XX A1034360-derived oligonucleotide SEQ ID 4729.
DE

```

```

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
OS
XX WO200285309-A2.
XX
XX 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
XX
XX 24-APR-2001; 2001US-0286036P.
XX
XX (EPTG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4729; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC pulmonary obstruction, and/or surfactant hypoproduction and/or lung
CC inflammation, allergies and/or bronchoconstriction and/or lung
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 18 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 20;
XX Best Local Similarity 94.7%; Pred. No. 9.9e+02;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAAAAAAAAAAAAA 2724
|| ||||||||||||||||

```


CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 18 A; 0 C; 1 G; 1 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2706 ACTAAAAA 2724
Db 2 AGTAAAAA 20
RESULT 1264
ADH66659/c
ID ADH66659 standard; DNA; 20 BP.
XX
AC ADH66659;
XX
XX
DT 25-MAR-2004 (first entry)
XX
DE Human glucocorticoid receptor-specific antisense oligonucleotide #3493.
XX
XX antisense oligonucleotide; glucocorticoid receptor; infection;
KW inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
XX Homo sapiens.
OS
XX
XX WO2003099215-A2.
PN
XX
XX 04-DEC-2003.
PD
XX
XX 20-MAY-2003; 2003WO-US016084.
PF
XX
XX 20-MAY-2002; 2002US-0381857P.
PR
XX
XX (PHAA) PHARMACIA CORP.
PA
XX
PI Crosby SD, Nalseth AB;
XX
XX WPI; 2004-035034/03.
DR
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
PT
XX
XX Claim 4; SEQ ID NO 3493; 985pp; English.
PS
XX
XX The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX
SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2708 TAAAAA 2726
Db 19 TCAAAAAA 1
RESULT 1265
ADK74413/c
ID ADK74413 standard; DNA; 20 BP.
XX
AC ADK74413;
XX
XX 20-MAY-2004 (first entry)
DT
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1747.
XX
XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
XX Synthetic.
OS
XX
XX WO2004016754-A2.
PN
XX
XX 26-FEB-2004.
PD
XX
XX 14-AUG-2003; 2003WO-US025465.
PF
XX
XX 14-AUG-2002; 2002US-0403416P.
PR
XX
XX (PHAA) PHARMACIA CORP.
PA
XX
PI Roberts SL;
XX
XX WPI; 2004-203785/19.
DR
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
PT
XX
XX Claim 4; SEQ ID NO 1747; 417pp; English.
PS
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, arthritic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, chronic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
XX
SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2708 TAAAAA 2726
Db 19 TCAAAAAA 1

RESULT 1266
ADM14371/c
ID ADM14371 standard; DNA; 20 BP.
XX AC
AC ADM14371;
XX
DT 01-JUL-2004 (first entry)
XX
XX Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:558.
XX
XX chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytosolic; antidiabetic;
KW immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW neuroprotective; nontropic; antiarthritic; vasotropic; ophthalmological;
KW immunomodulatory; cardiovascular; gene therapy; inflammation;
KW Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW reperfusion injury; ophthalmic disorder; immunological disorder;
KW cardiovascular disorder; neurological disorder; ss.
XX
OS Homo sapiens.
OS
OS Synthetic.
XX
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages and all cytidine
FT residues are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX WO2004028458-A2.
XX
XX 08-APR-2004.
XX
XX 25-SEP-2003; 2003WO-US030374.
XX
XX 25-SEP-2002; 2002US-0413549P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Gierse JK;
XX
XX WPI; 2004-305094/28.
XX
XX New antisense compound, having a sequence targeted to a nucleic acid
XX encoding mPGES-1, useful for preparing a composition for treating e.g.,
XX inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
XX ischemia.
XX
XX Claim 4; SEQ ID NO 558; 132pp; English.
XX
XX The present sequence represents a chimeric antisense oligonucleotide
XX targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
XX human mPGES-1 gene is located on chromosome 9, more specifically to
XX 9q34.3. The present invention also describes: (1) antisense compounds,
XX having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
XX mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
XX inhibits its expression; (2) a method of inhibiting the expression of
XX mPGES-1 in cells or tissues; and (3) a method of treating an animal
XX having a disease or condition associated with mPGES-1. mPGES-1 chimeric
XX antisense oligonucleotides and antisense compounds have cytostatic,
XX antidiabetic, immunomodulatory, cardiant, neuroprotective,
XX antiinflammatory, neuroprotective, nontropic, antiarthritic, vasotropic,
XX

CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 0 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2707 CTAAGAAAAAAGAAAAA 2725
Db 19 CCAAAAAAAGAAAAA 1

RESULT 1267
ADP69305/c
ID ADP69305 standard; DNA; 20 BP.
XX AC
AC ADP69305;
XX
DT 09-SEP-2004 (first entry)
XX
XX Human mitoNEET-specific antisense oligonucleotide #199.
XX
XX human; antisense oligonucleotide; mitochondrial membrane;
KW insulin sensitising antidiabetic thiazolidinediones; mitoNEET; diabetes;
KW immunological disorder; cardiovascular disorder; including hypertension;
KW neurological disorders; ischaemia; reperfusion; ss;
KW 2'-methoxyethyl gapmer; 2'-MOE gapmer; phosphorothioate backbone.
XX
XX Homo sapiens.
XX
XX WO2004053060-A2.
XX
XX 24-JUN-2004.
XX
XX 25-NOV-2003; 2003WO-US037621.
XX
XX 06-DEC-2002; 2002US-0431529P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Colca JR;
XX
XX WPI; 2004-468836/44.
XX
XX New antisense oligonucleotides encoding mitoNEET, useful for modulating
XX mitoNEET expression or for treating diseases associated with mitoNEET,
XX e.g. diabetes, immunological disorders or cardiovascular disorders.
XX
XX Claim 4; SEQ ID NO 199; 226pp; English.
XX
XX The invention comprises antisense oligonucleotides that are targeted to
XX the nucleic acids encoding a family of human proteins from mitochondrial
XX membranes, which bind insulin sensitising, antidiabetic
XX thiazolidinediones (referred to as: mitoNEET). The antisense
XX oligonucleotides of the invention are useful for modulating mitoNEET
XX expression and for treating diseases or conditions associated with
XX mitoNEET, such as: diabetes, immunological disorders, cardiovascular
XX disorders including hypertension, neurological disorders, and
XX ischaemia/reperfusion injuries. The present DNA sequence represents a
XX mitoNEET-specific antisense oligonucleotide of the invention. NOTE: The
XX present sequence is a 2'-methoxyethyl (2'-MOE) gapmer with a
XX phosphorothioate backbone.
XX
SQ Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 20;
Best Local Similarity 94.7%; Pred. No. 9.9e+02;

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Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAAAAA 2726
    ||| ||||| ||||| |||||
Db 19 TAAACAAAAAAAAAAAAAAAAA 1

RESULT 1268
AAQ75622/c
ID AAQ75622 standard; DNA; 21 BP.
XX
AC AAQ75622;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PT 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
WPI; 1995-018287/03.
XX
Analysis of cDNA and gene expression - by amplification of mRNA followed
by digestion with restriction enzymes.
XX
Disclosure; Page 8; 11pp; Japanese.
XX
A method for the analysis of cDNA comprises (a) preparing an aggregate of
double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
and using the aggregate of mRNAs as the template for each reverse
transcription primer; (b) digesting each of the prepared aggregates of
the double-stranded cDNAs with restriction enzyme and; (c)
electrophoresing the digested aggregate of cDNAs in separate lanes. The
method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 2 C; 2 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2725
    ||| ||||| ||||| |||||
Db 19 CCAAAAAAAAAAAAAAAAAA 1

RESULT 1269
AAQ75735/c
ID AAQ75735 standard; DNA; 21 BP.
XX
AC AAQ75735;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.

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XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX Disclosure; Page 8; 11pp; Japanese.
PS
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
CC
XX SQ Sequence 21 BP; 0 A; 1 C; 3 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2725
    ||| ||||| ||||| |||||
Db 19 CCAAAAAAAAAAAAAAAAAA 1

RESULT 1270
AAQ75738/c
ID AAQ75738 standard; DNA; 21 BP.
XX
AC AAQ75738;
XX
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
KW
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX Disclosure; Page 8; 11pp; Japanese.
PS
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
CC
XX SQ Sequence 21 BP; 0 A; 1 C; 3 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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PN JP06303997-A.
PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 8; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 21;
XX Best Local Similarity 94.7%; Pred. No. 1e+03;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAAAAAAA 2726
XX | | | | | | | | | | | | | | | | | | | | | |
XX Db 19 TGAATAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1277
XX AAQ75742/c
XX ID AAQ75742 standard; DNA; 21 BP.
XX
XX AC AAQ75742;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 8; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 21;
XX Best Local Similarity 94.7%; Pred. No. 1e+03;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAAAAAAA 2726
XX | | | | | | | | | | | | | | | | | | | | | |
XX Db 19 TGAATAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1277
XX AAQ75742/c
XX ID AAQ75742 standard; DNA; 21 BP.
XX
XX AC AAQ75742;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 8; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse

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CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 21;
XX Best Local Similarity 94.7%; Pred. No. 1e+03;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2725
XX | | | | | | | | | | | | | | | | | | | | | |
XX Db 19 CGAAAAATAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1278
XX AAQ75747/c
XX ID AAQ75747 standard; DNA; 21 BP.
XX
XX AC AAQ75747;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 8; 11pp; Japanese.
XX
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 21 BP; 0 A; 2 C; 2 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17.4; DB 1; Length 21;
XX Best Local Similarity 94.7%; Pred. No. 1e+03;
XX Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 2707 CTAATAAAAAAAAAAAAAAAAAA 2725
XX | | | | | | | | | | | | | | | | | | | | | |
XX Db 19 CGAAAAATAAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1279
XX AAQ75758/c
XX ID AAQ75758 standard; DNA; 21 BP.
XX
XX AC AAQ75758;

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XX 04-AUG-1995 (first entry)
DT Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
KW
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX Disclosure; Page 8; 11pp; Japanese.
PS
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726
Db | | | | | | | | | | | | | | | | | |
19 TGAATAAAAAAAAAAAAAAAAAA 1

RESULT 1280
AAQ75628/c
ID AAQ75628 standard; DNA; 21 BP.
AC AAQ75628;
XX
XX 04-AUG-1995 (first entry)
DT Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
KW
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX Disclosure; Page 6; 11pp; Japanese.
PS
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 3 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726
Db | | | | | | | | | | | | | | | | | |
19 TGAATAAAAAAAAAAAAAAAAAA 1

RESULT 1280
AAQ75764/c
ID AAQ75764 standard; DNA; 21 BP.
AC AAQ75764;
XX
XX 04-AUG-1995 (first entry)
DT Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
KW
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR

```

```

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX Disclosure; Page 9; 11pp; Japanese.
PS
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726
Db | | | | | | | | | | | | | | | | | |
19 TGAATAAAAAAAAAAAAAAAAAA 1

RESULT 1281
AAQ75628/c
ID AAQ75628 standard; DNA; 21 BP.
AC AAQ75628;
XX
XX 04-AUG-1995 (first entry)
DT Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
KW
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX Disclosure; Page 6; 11pp; Japanese.
PS
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-075798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 3 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2726
Db | | | | | | | | | | | | | | | | | |
19 TGAATAAAAAAAAAAAAAAAAAA 1

RESULT 1280
AAQ75764/c
ID AAQ75764 standard; DNA; 21 BP.
AC AAQ75764;
XX
XX 04-AUG-1995 (first entry)
DT Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
KW
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR

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Qy      2708 TAAAAAAAAAAAAAAA 2726  
Db          |  
            |  
            |  
            |  
19 TCATAAAAAAAAAA 1
```

```
RESULT 1282  
AAQ75636/c  
ID    AAQ75636 standard; DNA; 21 BP.  
XX  
AC    AAQ75636;  
XX  
DT    04-AUG-1995 (first entry)  
XX  
DE Reverse transcription primer used in cDNA analysis technique.
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```
KW Analysis; Gene expression; reverse transcription; primer; CDNA;  
KW aggregate; restriction enzyme; ss.  
XX  
OS Synthetic.  
XX  
PN JP06303997-A.  
XX  
PD 01-NOV-1994.  
XX  
PF 16-APR-1993;   93JP-00112515.  
XX  
PR 16-APR-1993;   93JP-00112515.  
XX  
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.  
XX  
DR WPI; 1995-018287/03.  
XX  
PT Analysis of cdna and gene expression - by amplification of mRNA followed  
by digestion with restriction enzymes.  
XX  
PS Disclosure; Page 6; lpp; Japanese.  
XX
```

```
A method for the analysis of cDNA comprises (a) preparing an aggregate of  
double-stranded cDNAs by using an aggregate of mRNAs and a plural type of  
labelled reverse transcription primers (GENESEQ files AAQ75547-Q7S798)  
and using the aggregate of mRNAs as the template for each reverse  
transcription primer; (b) digesting each of the prepared aggregates of  
the double-stranded cDNAs with restriction enzyme and; (c)  
electrophoresing the digested aggregate of cDNAs in separate lanes. The  
method can be used to analyse gene expression rapidly and easily
```

```
SQ Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
```

```
Query Match              0.6%; Score 17.4; DB 1; Length 21;  
Best Local Similarity 94.7%; Pred. No. le+03;  
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0
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```
Qy      2708 TAAAAAAAAAAAAAAA 2726  
Db          |  
            |  
            |  
            |  
19 TCATAAAAAAAAAA 1
```

```
RESULT 1283  
AAQ75610/c  
ID    AAQ75610 standard; DNA; 21 BP.  
XX  
AC    AAQ75610;  
XX  
DT    04-AUG-1995 (first entry)
```

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DE Reverse transcription primer used in cDNA analysis technique.
```

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KW Analysis; Gene expression; reverse transcription; primer; CDNA;  
KW aggregate; restriction enzyme; ss.  
XX  
OS Synthetic.  
XX  
PN JP06303997-A.
```

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XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX
XX Disclosure; Page 5; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 1 C; 3 G; 17 T; 0 U; 0 Other;
SQ
    Query Match          0.6%; Score 17.4; DB 1; Length 21;
    Best Local Similarity 94.7%; Pred. NO. 1e+03;
    Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
    QY 2707 CTAAAAAAAAAAAAAAAAAAAA 2725
    DB 19 CCAAAAAAAAAAAAAAAAAAAAA 1
    | | | | | | | | | | | | | | | |
RESULT 1284
AAQ75756/c
ID ID AAQ75756 standard; DNA; 21 BP.
XX
XX AAQ75756;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
KW
XX
XX Synthetic.
OS
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX
XX Disclosure; Page 8; 11pp; Japanese.
PS
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC cDNA;

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```

CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 3 A; 1 C; 0 G; 17 T; 0 U; 0 Other;

Query Match          0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAAAAAA 2726
Db 19 TGAATAAAAAAAAAAAAAAAAAA 1

RESULT 1285
AAQ75619/c
ID AAQ75619 standard; DNA; 21 BP.
XX
AC AAQ75619;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 1 C; 3 G; 17 T; 0 U; 0 Other;

Query Match          0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAAAAAA 2725
Db 19 CCAATAAAAAAAAAAAAAAAAAA 1

RESULT 1286
AAQ75621/c
ID AAQ75621 standard; DNA; 21 BP.
XX
AC AAQ75621;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX

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DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 1 C; 2 G; 18 T; 0 U; 0 Other;

Query Match          0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAAAAAAA 2725
Db 19 CCAATAAAAAAAAAAAAAAAAAA 1

RESULT 1287
AAQ75635/c
ID AAQ75635 standard; DNA; 21 BP.
XX
AC AAQ75635;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX

```

PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

PS Disclosure; Page 6; 11pp; Japanese.

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 1 A; 1 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 21;
 Best Local Similarity 94.7%; Pred. No. 1e+03; Mismatches 0; Gaps 0;
 Matches 18; Conservative 0; Indels 1; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2726

Db 19 TCAAAAAAAAAAAAAAAAAA 1

RESULT 1288

AAQ75759/c

ID AAQ75759 standard; DNA; 21 BP.

AC AAQ75759;

XX

DT 04-AUG-1995 (first entry)

XX

DE Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

OS JP06303997-A.

PN 01-NOV-1994.

XX

PD 16-APR-1993; 93JP-00112515.

XX

PF 16-APR-1993; 93JP-00112515.

XX

PR 16-APR-1993; 93JP-00112515.

XX

PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX

DR WPI; 1995-018287/03.

XX

PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

PS Disclosure; Page 8; 11pp; Japanese.

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 21;
 Best Local Similarity 94.7%; Pred. No. 1e+03; Mismatches 0; Gaps 0;
 Matches 18; Conservative 0; Indels 1; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2726

Db 19 TGAATAAAAAAAAAAAAAA 1

RESULT 1289

AAQ75782/c

ID AAQ75782 standard; DNA; 21 BP.

XX

AC AAQ75782;

XX

DT 04-AUG-1995 (first entry)

XX

DE Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

OS JP06303997-A.

PN 01-NOV-1994.

XX

PD 16-APR-1993; 93JP-00112515.

XX

PF 16-APR-1993; 93JP-00112515.

XX

PR 16-APR-1993; 93JP-00112515.

XX

PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX

DR WPI; 1995-018287/03.

XX

PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX Disclosure; Page 9; 11pp; Japanese.

XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX Sequence 21 BP; 0 A; 3 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.8%; Score 17.4; DB 1; Length 21;
 Best Local Similarity 94.7%; Pred. No. 1e+03; Mismatches 0; Gaps 0;
 Matches 18; Conservative 0; Indels 1; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2727

Db 19 AGAAAAAAAAAAAAAAAAA 1

RESULT 1290

AAQ75750/c

ID AAQ75750 standard; DNA; 21 BP.

XX

AC AAQ75750;

XX

DT 04-AUG-1995 (first entry)

XX

DE Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;

KW aggregate; restriction enzyme; ss.

XX Synthetic.

OS JP06303997-A.

XX

PD 01-NOV-1994.
 XX
 PF 16-APR-1993; 93JP-00112515.
 XX
 PR 16-APR-1993; 93JP-00112515.
 XX
 PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX
 XX WPI; 1995-018287/03.
 DR
 XX
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 PT
 XX Disclosure; Page 8; 11pp; Japanese.
 XX
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 21 BP; 0 A; 3 C; 1 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17.4; DB 1; Length 21;
 Best Local Similarity 94.7%; Pred. No. 1e+03;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAAAAATAAAAAAAAAA 2725
 Db 19 CGAAAAAATAAAAAAAAAA 1

RESULT 1291
 AAQ75613/c
 ID AAQ75613 standard; DNA; 21 BP.
 XX
 AC AAQ75613;
 XX
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.
 DE
 XX Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX Synthetic.
 OS
 XX JP06303997-A.
 PN
 XX 01-NOV-1994.
 PD
 XX 16-APR-1993; 93JP-00112515.
 PF
 XX 16-APR-1993; 93JP-00112515.
 PR
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 PA
 XX WPI; 1995-018287/03.
 DR
 XX
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 PT
 XX Disclosure; Page 5; 11pp; Japanese.
 XX
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX

CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 21 BP; 1 A; 0 C; 2 G; 18 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17.4; DB 1; Length 21;
 Best Local Similarity 94.7%; Pred. No. 1e+03;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTAAAAAATAAAAAAAAAA 2725
 Db 19 CCAAAAAATAAAAAAAAAA 1

RESULT 1292
 AAQ75638/c
 ID AAQ75638 standard; DNA; 21 BP.
 XX
 AC AAQ75638;
 XX
 XX 04-AUG-1995 (first entry)
 DT Reverse transcription primer used in cDNA analysis technique.
 DE
 XX Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX Synthetic.
 OS
 XX JP06303997-A.
 PN
 XX 01-NOV-1994.
 PD
 XX 16-APR-1993; 93JP-00112515.
 PF
 XX 16-APR-1993; 93JP-00112515.
 PR
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 PA
 XX WPI; 1995-018287/03.
 DR
 XX
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 PT
 XX Disclosure; Page 6; 11pp; Japanese.
 XX
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17.4; DB 1; Length 21;
 Best Local Similarity 94.7%; Pred. No. 1e+03;
 Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2726
 Db 19 TCAAAAAATAAAAAAAAAA 1

RESULT 1293
 AAQ75749/c
 ID AAQ75749 standard; DNA; 21 BP.
 XX
 AC AAQ75749;
 XX
 XX 04-AUG-1995 (first entry)
 DT

```

XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX KW Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 8; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2725
DB 19 CGAAAAA 1

RESULT 1294
AAQ75770/C
ID AAQ75770 standard; DNA; 21 BP.
XX AC AAQ75770;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX KW Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 9; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 3 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA 2726
DB 19 AAAAAA 1

RESULT 1295
AAQ75766/C
ID AAQ75766 standard; DNA; 21 BP.
XX AC AAQ75766;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX KW Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 9; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 3 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA 2726
DB 19 AAAAAA 1

```

```

PT by digestion with restriction enzymes.
XX Disclosure; Page 9; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAA 2727
DB 19 AAAAAA 1

RESULT 1295
AAQ75766/C
ID AAQ75766 standard; DNA; 21 BP.
XX AC AAQ75766;
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX KW Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 9; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 1 A; 3 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA 2726
DB 19 AAAAAA 1

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Db      19 TCAAAAAAAAAAAAAAAAAA 1

RESULT 1296
AAV17253/c
ID      AAV17253 standard; DNA; 21 BP.
XX
XX
AC      AAV17253;
XX
XX      28-MAY-1998 (first entry)
XX
XX      Primer KC-1 for vector construction.
XX
XX      PCR primer; integration cassette; site-specific recombination sequence;
KW      genetic modification; site-specific genomic insertion; ss.
XX
XX      Synthetic.
XX
XX      WO9746691-A1.
XX
XX      11-DEC-1997.
XX
XX      30-MAY-1997; 97WO-CA000375.
XX
XX      03-JUN-1996; 96US-00656838.
XX
XX      (UYLA-) UNIV LAVAL.
XX
XX      Gagne M, Sirard M, Pothier F;
XX
XX      WPI; 1998-042199/04.
XX
XX      DNA construct for genetic modification of eukaryotic cells - comprising
PT      integration cassette flanked by site-specific recombination sequences.
XX
XX      Example 1; Page 17; 36pp; English.
XX
XX      This sequence represents a primer used in the preparation of the DNA
CC      construct of the invention. The construct is for inserting a DNA fragment
CC      of interest into a eukaryotic host cell, and comprises an integration
CC      cassette flanked by site-specific recombination sequences in which is
CC      inserted the DNA of interest, where the DNA fragment of interest is
CC      flanked by a nucleotide sequence sharing homology to a nucleotide
CC      sequence present in more than one copy in the eukaryotic cell. the
CC      construct is used for genetic modification of diploid plant and animal
CC      cells. The integration cassette improves the genomic insertion of the DNA
CC      fragment of interest in a site-specific manner
XX
XX      Sequence 21 BP; 5 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
SQ

Query Match      0.6%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+03;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      275 ATTGAGGAATTGGGAGG 293
      |||||
Db      19 ATTGAGGAATTGGGAGG 1

RESULT 1297
ADP04929/c
ID      ADP04929 standard; DNA; 18 BP.
XX
XX      ADP04929;
XX
XX      29-JUL-2004 (first entry)
XX
XX      PCR primer 1 used to amplify sea squirt DNA.
XX
XX      primer; ss; sea squirt; regeneration medicine; gene therapy;
KW      cell proliferation; differentiation; reproduction;
KW      environmental measurement; water survey; PCR.
XX
XX

Ciona intestinalis.
OS
XX      JP2004057129-A.
XX
XX      26-FEB-2004.
XX
XX      31-JUL-2002; 2002JP-00222593.
XX
XX      31-JUL-2002; 2002JP-00222593.
XX
XX      (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
XX      WPI; 2004-287079/27.
XX
XX      Novel gene cluster which is specifically expressed in tissue or organ
PT      during developmental phase of sea squirt, useful for elucidation of
PT      mechanism of development of tissue or organ of sea squirt.
XX
XX      Disclosure; Page 38; 1846pp; Japanese.
XX
XX      This invention relates to novel genes and the encoded proteins thereof
CC      that are derived from the sea squirt Ciona intestinalis. Specifically, it
CC      refers to those genes that are expressed in the tissues or organs of the
CC      sea squirt during its developmental phase. The present invention
CC      describes the identification of these genes as useful for elucidation of
CC      the mechanism of development and hence for developing regeneration
CC      medicines and gene therapy techniques. Accordingly, they can be used in
CC      the research of various genetic diseases, as well as the analysis of cell
CC      proliferation, differentiation and reproduction. Furthermore, such
CC      compositions can be useful for environmental measurements and water
CC      surveys, particularly for sea water surveys, and also for the preparation
CC      of transformed sea squirt for improving edibility of sea squirt such as
CC      Halocynthia roretzi. This oligonucleotide sequence is a PCR primer used
CC      to amplify sea squirt DNA given in an exemplification of the invention.
XX
XX      Sequence 18 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 1 Other;
SQ

Query Match      0.6%; Score 17.2; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 9.7e+02;
Matches 17; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      2708 TAAAAAAAAAAAAAAAAA 2725
      :|||||
Db      18 BAAAAAAAAAAAAAAAAA 1

RESULT 1298
AAT94431
ID      AAT94431 standard; mRNA; 19 BP.
XX
XX      AAT94431;
XX
XX      02-MAR-1998 (first entry)
XX
XX      Template mRNA poly-A tail SEQ ID NO:1 from WO9729211.
XX
XX      Primer; detection; characterisation; mRNA; restriction display PCR;
KW      synthesis; cDNA; ss.
XX
XX      Synthetic.
OS
XX      Homo sapiens.
XX
XX      WO9729211-A1.
XX
XX      14-AUG-1997.
XX
XX      07-FEB-1997; 97WO-US002009.
XX
XX      09-FEB-1996; 96US-0011379P.
XX
XX      (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
XX      Weinstein JN, Boulamwini J;
PI

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XX WPI; 1997-415362/38.
XX
XX Detection and characterisation of mRNA by restriction display PCR -
XX comprising synthesis of cDNA, digestion with a restriction endonuclease,
XX ligation to an adaptor DNA and PCR amplification.
XX
XX Disclosure; Page 24; 40pp; English.
XX
XX A method has been improved for detecting and characterising mRNA
XX molecules which includes synthesising a double stranded (ds) cDNA from
XX isolated mRNA, digesting the ds cDNA with a restriction endonuclease to
XX produce cDNA fragments in which at least one end of the cDNA fragments
XX has a sequence capable of hybridising to an adaptor DNA sequence. The
XX improvement comprises: (a) hybridising adaptor DNA sequences to at least
XX one end of the cDNA fragments; (b) ligating the adaptor DNA sequences to
XX the cDNA fragments; (c) amplifying the cDNA fragments having ligated
XX adaptor DNA sequences by a PCR using primers that hybridise to the ends
XX of the cDNA fragments, where the primers have at least one nucleotide at
XX the 3' end that specifically hybridises to a subset of cDNA molecules;
XX and (d) detecting the presence of the resulting amplified cDNA fragments.
XX The present sequence represent a template poly-A tail used in the present
XX specification. The method designate restriction display PCR can be used
XX for characterising cells based on their mRNA content, for representing
XX expressed genes, and for discovery of therapeutics that alter cellular
XX gene expression. The method is also useful for characterising cells of a
XX variety of types and under a variety of physiological conditions. The
XX method is also useful for identifying cells or tissue from particular
XX individuals or species based on the fingerprint obtained from the mRNA
XX content of isolated cells or tissue and comparing it to cells or tissue
XX from a known source
XX
XX Sequence 19 BP; 17 A; 0 C; 0 G; 0 T; 0 U; 2 Other;
XX
XX Query Match 0.6%; Score 17.2; DB 1; Length 19;
XX Best Local Similarity 94.4%; Pred. No. 1e+03;
XX Matches 17; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAAAAAAA 2725
XX :|||||
XX Db 2 BAAAAAATAAAAAAAAAA 19
XX
XX RESULT 1299
XX AA18390/c
XX ID AA18390 standard; DNA; 19 BP.
XX
XX AC AA18390;
XX
XX AC
XX
XX DT 11-MAY-1999 (first entry)
XX
XX DE RT-PCR primer of the invention SEQ ID 31.
XX
XX KW RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
XX
XX OS Synthetic.
XX
XX PN JP11032765-A.
XX
XX PD 09-FEB-1999.
XX
XX PF 18-JUL-1997; 97JP-00208312.
XX
XX PR 18-JUL-1997; 97JP-00208312.
XX
XX PA (TAKI ) TAKARA SHUZO CO LTD.
XX
XX DR WPI; 1999-183822/16.
XX
XX PT Peptides having at least two new nucleotides - useful as primers in RT-
XX PCR.
XX
XX PS Example 1; Page 12; 19pp; Japanese.

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XX This sequence represents a primer of the invention. The invention relates
XX to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta
XX -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or
XX a nucleotide with volumal sequence; m = 0 or 1; alpha = thymine; n =
XX natural number indicating the repetition of alpha; beta, delta = V or N;
XX V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or
XX thymine; gamma = thymine; k = natural number of 3 or over indicating the
XX repetition of gamma, in which thymine expressed by gamma is composed of
XX 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are
XX useful as primers for RT-PCR and determination of base sequences. The new
XX sequences allow for reproductive and highly efficient analysis of gene
XX sequences
XX
XX Sequence 19 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 2 Other;
XX
XX Query Match 0.6%; Score 17.2; DB 1; Length 19;
XX Best Local Similarity 94.4%; Pred. No. 1e+03;
XX Matches 17; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAAAAAAA 2725
XX :|||||
XX Db 18 BAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1300
XX AAA25450/c
XX ID AAA25450 standard; DNA; 17 BP.
XX
XX AC AAA25450;
XX
XX DT 19-JUL-2000 (first entry)
XX
XX DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1948.
XX
XX KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
XX hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
XX gene expression modification; cancer; phosphorothioate; endonuclease;
XX anticancer; breast cancer; endometrium cancer; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO9954459-A2.
XX
XX PD 28-OCT-1999.
XX
XX PF 19-APR-1999; 99WO-US008547.
XX
XX PR 20-APR-1998; 98US-0082404P.
XX
XX PR 23-JUN-1998; 98US-00103636.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX
XX PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
XX Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;
XX Matulic-Adamic J;
XX
XX DR WPI; 2000-013248/01.
XX
XX PT New nucleic acids that interact, and optionally cleave, target sequences,
XX used to treat cancer.
XX
XX PS Claim 77; Page 79; 148pp; English.
XX
XX The present invention describes nucleic acids (A) that interact stably
XX with a target sequence and contain at least one phosphorodithioate
XX link, having endonuclease activity. (A), and more generally any catalytic
XX nucleic acid (A') that modulates expression of the oestrogen receptor
XX gene, are used to treat cancer (particularly of breast or endometrium),
XX in vivo or by transforming cells ex vivo and implanting treated cells, or
XX for other conditions associated with levels of oestrogen receptor.
XX Because of the high selectivity for targeted RNA, (A) can also be used to
XX correlate inhibition of gene expression with alterations in phenotype,
XX

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CC particularly for identification of therapeutic targets, and as research
CC reagents (for RNA, in the same way that restriction endonucleases are
CC used with DNA). The combination of modifications in (A) improves
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
CC AAA24748 to AAA25992 represent their corresponding target sequences.
CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
CC sequences, and AAA26107 to AAA26218 represent their corresponding target
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC antisense oligonucleotides used in the exemplification of the present
CC invention
XX
SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAA 1

RESULT 1301
AAA98232/C
ID AAA98232 standard; DNA; 17 BP.
XX
AC AAA98232;
XX
DT 30-JAN-2001 (first entry)
XX
DE Human retrovirus HERV LTR PCR primer #31.
XX
KW Cell-specific expression; tissue-specific expression; gene therapy; LTR;
KW U3-R segment; long terminal repeat; retroviral expression vector;
KW PCR primer; ss.
XX
OS Human endogenous retrovirus.
XX
XN WO200053789-A2.
PN
PD 14-SEP-2000.
XX
PF 09-MAR-2000; 2000WO-EP002064.
XX
PR 10-MAR-1999; 99DE-01010650.
XX
XX (GSFU-) GSF FORSCHUNGSZENTRUM UMWELT & GESUNDHEI.
XX
PI Leib-Moesch C, Schoen U, Baust C;
XX
DR WPI; 2000-587442/55.
XX
PT Retroviral expression vector, useful in gene therapy, contains a promoter
PT from a human endogenous retrovirus to provide cell-specific expression.
XX
PS Disclosure; Page 27; 67pp; German.
XX
XX This invention describes a novel retroviral expression vector (A)
XX containing DNA sequences (I) for packaging vector RNA and for cell-
XX specific expression of proteins or peptides encoding by heterologous DNA
XX (II). The sequences controlling cell-specific expression contain a cell-
XX specifically regulatable promoter region (P) from a human endogenous
XX retrovirus (HERV) DNA sequence. The invention also describes (a) mRNA and
XX RNA of (A); (b) prokaryotic and eukaryotic cells containing (A); (c)
XX eukaryotic cells containing (A) in integrated form; (d) viruses
XX containing a retroviral expression vector RNA derived from (A); (e) a
XX method for producing the virions of (d); (f) a method for incorporating
XX protein-encoding nucleic acid sequences into a eukaryotic cell by
XX infection with the virions of (d); and (g) a retroviral vector system
XX containing (A) and a packaging cell line, that contains at least one
XX (recombinant) retrovirus construct that encodes for the packaging
XX proteins of (A). (A) are used for cell- or tissue-specific expression of

CC foreign genes for gene therapy and to produce virions for introducing
CC (II) into the chromosomal DNA of eukaryotic cells, preferably mammalian
CC and specifically human. (A) retain the advantages of usual retroviral
CC promoters with all the signal structures required for transcription in a
CC small region within the U3-R segment, but without their disadvantages
CC (excessive strength and limited cell specificity). Since (A) are derived
CC from endogenous (harmless) viral sequences, they do not introduce any new
CC viral sequences into the genome and recombination will not create new
CC types of retrovirus. The promoters provide cell or tissue specific
CC expression, according to which HERV they are derived from
XX
SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAA 1

RESULT 1302
AAA50197/C
ID AAA50197 standard; DNA; 17 BP.
XX
AC AAA50197;
XX
DT 07-NOV-2000 (first entry)
XX
DE 2'-Methoxyethoxy-modified phosphorothioate oligonucleotide.
XX
KW Phosphorothioate oligonucleotide; H-phosphonate chemistry; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..19
FT /tag= a
FT /note= "2'-methoxyethoxy modified thymidine"
FT modified_base 1..17
FT /tag= b
FT /note= "phosphorothioate internucleoside linkages"
XX
XN WO200047593-A1.
XX
PD 17-AUG-2000.
XX
PF 11-FEB-2000; 2000WO-US003543.
XX
PR 12-FEB-1999; 99US-00250075.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Manoharan M, Maier MA;
XX
DR WPI; 2000-558188/51.
XX
PT Preparation of mixed backbone oligomeric compounds useful as e.g. primers
PT for diagnostic tests, involves oxidation of H-phosphonate internucleoside
PT linkages to phosphodiester internucleoside linkages.
XX
XX Example 12; Page 34; 49pp; English.
XX
XX The present sequence is that of a phosphorothioate oligonucleotide
XX containing 20 T nucleobases, each having a 2'-methoxyethoxy group on its
XX 5' ribosyl sugar moiety. It is an example of an oligomeric compound
XX produced according to the methods of the invention. The invention
XX provides compounds and methods for the preparation of mixed backbone
XX oligomeric, or chimeric, compounds having phosphodiester internucleoside
XX linkages in addition to phosphorothioate and/or phosphoramidate
XX internucleoside linkages. The methods also include incorporation of
XX boranophosphate internucleoside linkages. The methods utilise H-

CC phosphonate intermediates that are coupled together forming contiguous
 CC regions of 1 or more H-phosphonate internucleoside linkages. Each
 CC contiguous region is subsequently oxidized to phosphodiester,
 CC phosphorothioate, phosphoramidate or boranophosphate internucleoside
 CC linkages prior to further elongation. Mixed backbone oligomeric compounds
 CC are prepared in this manner by oxidizing adjacent regions with different
 CC reagents. Oligomeric compounds of the invention are prepared using novel
 CC oxidation steps that oxidize a region of 1 or more H-phosphonate
 CC internucleoside linkages without degrading existing linkages that have
 CC been previously oxidized. The oligonucleotides obtained are useful as
 CC primers in PCR, probes, linkers, gene fragments and for other diagnostic
 CC tests on e.g. biological tissue, fluid, cells etc., as research reagents,
 CC and as antiviral agents

XX Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2725
 |||||
 Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1303
 ABT34715
 ID ABT34715 standard; DNA; 17 BP.
 XX
 AC ABT34715;
 DT 12-JUN-2003 (first entry)
 XX
 DE Tumour suppression related human fukutin oligo SEQ ID No 352.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 XX
 XX
 PN W02003025175-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004208.
 XX
 PR 17-SEP-2001; 2001FR-00011978.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 XX WPI; 2003-313353/30.

XX New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.

XX Disclosure; Page 75; 720pp; French.

XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the

CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterized by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention

XX Sequence 17 BP; 4 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1150 GATCATGCTGTTTACCA 1166
 |||||
 Db 1 GATCATGCTGTTTACCA 17

RESULT 1304
 AAD56441/c
 ID AAD56441 standard; DNA; 17 BP.
 XX
 AC AAD56441;
 XX
 DT 07-AUG-2003 (first entry)
 XX
 DE Antisense oligo #2, to elicit RNase H degradation of target RNA.
 XX
 KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
 KW antisense; ss.
 XX
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT misc_feature 9..10
 FT /tag= a
 FT /note= "Bases 9 and 10 are linked by a butanediol linker
 FT which is represented as B in page 49 and X in page 59,
 FT Fig 9 and 10 of the specification"

PN W02003037909-A1.

XX 08-MAY-2003.

XX 29-OCT-2002; 2002WO-CA001628.

XX 29-OCT-2001; 2001US-0330719P.

XX (UYMC-) UNIV MCGILL.

XX Damha MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;

XX WPI; 2003-421516/39.

XX Novel acyclic linker-containing oligonucleotide useful for preventing or
 PT decreasing translation, reverse transcription and/or replication of a
 PT target RNA in a system, comprises a modified deoxyribonucleotide.

XX Example 2; Page 90; 104pp; English.

XX The invention relates to an acyclic linker-containing oligonucleotide
 CC comprising at least one modified deoxyribonucleotide. Oligonucleotides of
 CC the invention are useful for preventing or decreasing translation,
 CC reverse transcription and/or replication of a target RNA in a system.
 CC They are useful for selectively preventing gene expression in a sequence-
 CC specific manner, for hybridising to complementary RNA such as cellular
 CC mRNA or viral RNA, to hybridise to and induce cleavage of complementary
 CC RNA. They are also useful therapeutically in formulations or medicaments

CC to prevent or treat a disease characterised by the expression of a
 CC particular target RNA. The invention is used in gene therapy. The present
 CC sequence is an antisense oligo used to elicit human RNase (ribonuclease)
 CC H degradation of target RNA. This sequence is used in the exemplification
 CC of the invention

SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
 |||||
 Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1305
 AAD56448/C
 ID AAD56448 standard; DNA; 17 BP.

XX AC AAD56448;

XX DT 07-AUG-2003 (first entry)

XX DE 2'-F-ANA antisense oligo #3, to elicit RNase H degradation of target RNA.

XX KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
 XX antisense; ss.

XX OS Unidentified.

XX FH Key Location/Qualifiers
 FT modified_base 1..17

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-deoxy-2'-fluoroarabinothymidine"

FT misc_feature 9..10

FT /*tag= b

FT /note= "Bases 9 and 10 are linked by a butanediol linker

FT which is represented as B in page 49 and Fig 5 and as X

FT in page 52, 55 and Fig 6 of the specification"

XX WO2003037909-A1.

XX PD 08-MAY-2003.

XX PF 29-OCT-2002; 2002WO-CA001628.

XX PR 29-OCT-2001; 2001US-0330719P.

XX PA (UYMC-) UNIV MCGILL.

XX PI Damha MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;

XX WPI; 2003-421516/39.

XX Novel acyclic linker-containing oligonucleotide useful for preventing or
 PT decreasing translation, reverse transcription and/or replication of a
 PT target RNA in a system, comprises a modified deoxyribonucleotide.

PS Example 2; Fig 5; 104pp; English.

XX The invention relates to an acyclic linker-containing oligonucleotide
 CC comprising at least one modified deoxyribonucleotide. Oligonucleotides of
 CC the invention are useful for preventing or decreasing translation,
 CC reverse transcription and/or replication of a target RNA in a system.
 CC They are useful for selectively preventing gene expression in a sequence-
 CC specific manner, for hybridising to complementary RNA such as cellular
 CC mRNA or viral RNA, to hybridise to and induce cleavage of complementary
 CC RNA. They are also useful therapeutically in formulations or medicaments
 CC to prevent or treat a disease characterised by the expression of a
 CC particular target RNA. The invention is used in gene therapy. The present

CC sequence is an antisense oligo used to elicit human RNase (ribonuclease)
 CC H degradation of target RNA. This sequence is used in the exemplification
 CC of the invention

SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
 |||||
 Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1306
 AAD56449/C
 ID AAD56449 standard; DNA; 17 BP.

XX AC AAD56449;

XX DT 07-AUG-2003 (first entry)

XX DE 2'-F-ANA antisense oligo #4, to elicit RNase H degradation of target RNA.

XX KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
 XX antisense; ss.

XX OS Unidentified.

XX FH Key Location/Qualifiers
 FT modified_base 1..17

FT /*tag= a

FT /mod_base= OTHER

FT /note= "2'-deoxy-2'-fluoroarabinothymidine"

FT misc_feature 12..13

FT /*tag= b

FT /note= "Bases 12 and 13 are linked by a butanediol linker

FT which is represented as B in page 49 and Fig 5 and as X

FT in page 55 and Fig 6 of the specification"

XX WO2003037909-A1.

XX PD 08-MAY-2003.

XX PF 29-OCT-2002; 2002WO-CA001628.

XX PR 29-OCT-2001; 2001US-0330719P.

XX PA (UYMC-) UNIV MCGILL.

XX PI Damha MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;

XX WPI; 2003-421516/39.

XX Novel acyclic linker-containing oligonucleotide useful for preventing or
 PT decreasing translation, reverse transcription and/or replication of a
 PT target RNA in a system, comprises a modified deoxyribonucleotide.

PS Example 2; Fig 5; 104pp; English.

XX The invention relates to an acyclic linker-containing oligonucleotide
 CC comprising at least one modified deoxyribonucleotide. Oligonucleotides of
 CC the invention are useful for preventing or decreasing translation,
 CC reverse transcription and/or replication of a target RNA in a system.
 CC They are useful for selectively preventing gene expression in a sequence-
 CC specific manner, for hybridising to complementary RNA such as cellular
 CC mRNA or viral RNA, to hybridise to and induce cleavage of complementary
 CC RNA. They are also useful therapeutically in formulations or medicaments
 CC to prevent or treat a disease characterised by the expression of a
 CC particular target RNA. The invention is used in gene therapy. The present
 CC sequence is an antisense oligo used to elicit human RNase (ribonuclease)
 CC H degradation of target RNA. This sequence is used in the exemplification

```

CC of the invention
XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match      0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAA 1

RESULT 1307
AAD56447/c
XX ID AAD56447 standard; DNA; 17 BP.
XX AC AAD56447;
XX DT 07-AUG-2003 (first entry)
XX DE 2'-F-ANA antisense oligo #2, to elicit RNase H degradation of target RNA.
XX KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
XX KW antisense; ss.
XX OS Unidentified.
XX FH Key Location/Qualifiers
XX modified_base 1..17
FT /mod_base= a
FT /note= "2'-deoxy-2'-fluoroarabinothymidine"
FT misc_feature 4..5
FT /*tag= b
FT /note= "Bases 4 and 5 are linked by a butanediol linker
FT which is represented as B in page 49 and Fig 5 and as X
FT in page 55 and Fig 6 of the specification"
XX PN WO2003037909-A1.
XX PD 08-MAY-2003.
XX PF 29-OCT-2002; 2002WO-CA001628.
XX PR 29-OCT-2001; 2001US-0330719P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;
XX WPI; 2003-42f516/39.
XX DR
XX PT Novel acyclic linker-containing oligonucleotide useful for preventing or
XX decreasing translation, reverse transcription and/or replication of a
XX target RNA in a system, comprises a modified deoxyribonucleotide.
XX PS Example 2; Fig 5; 104pp; English.
XX CC The invention relates to an acyclic linker-containing oligonucleotide
XX comprising at least one modified deoxyribonucleotide. Oligonucleotides of
XX the invention are useful for preventing or decreasing translation,
XX reverse transcription and/or replication of a target RNA in a system.
XX They are useful for selectively preventing gene expression in a sequence-
XX specific manner, for hybridising to complementary RNA such as cellular
XX mRNA or viral RNA, to hybridise to and induce cleavage of complementary
XX RNA. They are also useful therapeutically in formulations or medicaments
XX to prevent or treat a disease characterised by the expression of a
XX particular target RNA. The invention is used in gene therapy. The present
XX sequence is an antisense oligo used to elicit human RNase (ribonuclease)
XX H degradation of target RNA. This sequence is used in the exemplification
XX of the invention

```

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SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match      0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAA 1

RESULT 1308
AAD56450/c
XX ID AAD56450 standard; DNA; 17 BP.
XX AC AAD56450;
XX DT 07-AUG-2003 (first entry)
XX DE 2'-F-ANA antisense oligo #5, to elicit RNase H degradation of target RNA.
XX KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
XX KW antisense; ss.
XX OS Unidentified.
XX FH Key Location/Qualifiers
XX modified_base 1..17
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-deoxy-2'-fluoroarabinothymidine"
FT misc_feature 9..10
FT /*tag= b
FT /note= "Bases 9 and 10 are linked by a secouridine linker
FT which is represented as S in page 49 and X in page 57 and
FT Fig 1, 2, 7 and 8 of the specification"
XX PN WO2003037909-A1.
XX PD 08-MAY-2003.
XX PF 29-OCT-2002; 2002WO-CA001628.
XX PR 29-OCT-2001; 2001US-0330719P.
XX PA (UYMC-) UNIV MCGILL.
XX PI Damha MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;
XX WPI; 2003-421516/39.
XX DR
XX PT Novel acyclic linker-containing oligonucleotide useful for preventing or
XX decreasing translation, reverse transcription and/or replication of a
XX target RNA in a system, comprises a modified deoxyribonucleotide.
XX PS Example 2; Fig 7; 104pp; English.
XX CC The invention relates to an acyclic linker-containing oligonucleotide
XX comprising at least one modified deoxyribonucleotide. Oligonucleotides of
XX the invention are useful for preventing or decreasing translation,
XX reverse transcription and/or replication of a target RNA in a system.
XX They are useful for selectively preventing gene expression in a sequence-
XX specific manner, for hybridising to complementary RNA such as cellular
XX mRNA or viral RNA, to hybridise to and induce cleavage of complementary
XX RNA. They are also useful therapeutically in formulations or medicaments
XX to prevent or treat a disease characterised by the expression of a
XX particular target RNA. The invention is used in gene therapy. The present
XX sequence is an antisense oligo used to elicit human RNase (ribonuclease)
XX H degradation of target RNA. This sequence is used in the exemplification
XX of the invention
XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

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```
Query Match          0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAA 1

RESULT 1309
ADB40209
ID ADB40209 standard; DNA; 17 BP.
XX
AC ADB40209;
XX
DT 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #532.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 94; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match          0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAA 1

RESULT 1309
ADB40209
ID ADB40209 standard; DNA; 17 BP.
XX
AC ADB40209;
XX
DT 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #532.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 94; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match          0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAA 1

RESULT 1309
ADB40209
ID ADB40209 standard; DNA; 17 BP.
XX
AC ADB40209;
XX
DT 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #532.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 94; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
```

```
Query Match          0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1229 GATCTCCGAGATACAGG 1245
DB 1 GATCTCCGAGATACAGG 17

RESULT 1310
ACS2437
ID ACS2437 standard; DNA; 17 BP.
XX
AC ACS2437;
XX
DT 27-JUN-2003 (first entry)
XX
DE Human tumour suppressor sequence #1204.
XX
KW ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW tumour regression; apoptosis; virus resistance; diagnosis;
KW cellular degeneration.
XX
OS Homo sapiens.
XX
PN FR2826373-A1.
XX
PD 27-DEC-2002.
XX
PF 20-JUN-2001; 2001FR-00008139.
XX
PR 20-JUN-2001; 2001FR-00008139.
XX
PA (MOLE-) MOLECULAR ENGINES LAB SA.
XX
PI Tuijnder M, Telerman A, Amson R;
XX
DR WPI; 2003-250498/25.
XX
PT New nucleic acid sequences associated with tumor suppression, regression,
PT apoptosis or virus resistance are useful to diagnose and treat viral
PT disease, development of tumor cells and cell degeneration.
XX
PS Claim 1; Page 318; 798pp; French.
XX
CC This sequence represents an isolated nucleic acid sequence associated
CC with tumour suppression or regression, apoptosis or virus resistance. The
CC invention relates to these sequences or sequences having at least 80%
CC identity to them, and polypeptides encoded by the sequences or
CC polypeptides having 80% identity to the polypeptide sequences. The
CC invention is used to diagnose or treat viral disease or disease
CC characterized by development of tumour cells or cellular degeneration
XX
SQ Sequence 17 BP; 3 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match          0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1679 GATCCAGGTTTGATGCT 1695
DB 1 GATCCAGGTTTGATGCT 17

RESULT 1311
ADL48642/c
ID ADL48642 standard; RNA; 17 BP.
XX
AC ADL48642;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human IKK-gamma substrate sequence #1152.
XX
KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
```

KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
KW substrate; ds.
XX
OS Unidentified.
XX
XX WO200281628-A2.
XX
XX 17-OCT-2002.
XX
XX 03-APR-2002; 2002WO-US010512.
XX
XX 05-APR-2001; 2001US-00827395.
XX
XX 29-MAY-2001; 2001US-0294412P.
XX
XX 28-AUG-2001; 2001US-0315315P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Blatt L, Chowrira B, Haeberli P, Mcswiggen J, Foaugh K;
XX
XX WPI; 2003-058513/05.
XX
XX Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
XX Claim 59; SEQ ID NO 2175; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human IKK-
CC gamma substrate sequence.
XX
XX
XX Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;
Query Match 0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2535 GGCCTTGCTCCTCAGCCA 2551
Db 17 GGCCTTGCTCCTCAGCCA 1
RESULT 1312
ADI34488/c
ID ADI34488 standard; DNA; 17 BP.
XX
XX AC ADI34488;
XX
XX 22-APR-2004 (first entry)
XX
XX Nucleotide sequence of an oligo dT17.
XX
XX Nucleic acid amplification; RNA transcription; RNA polymerase; ss.
XX

OS Synthetic.
XX
XX WO2003102243-A1.
XX
XX 11-DEC-2003.
XX
XX 30-MAY-2003; 2003WO-US017103.
XX
XX 31-MAY-2002; 2002US-0384454P.
XX
XX (JANC) JANSSEN PHARM NV.
XX
XX Kamme FC, Zhu JY;
XX
XX WPI; 2004-035466/03.
XX
XX Amplifying for RNA in a sample, useful for improving RNA polymerase based
PT RNA transcription from a polynucleotide template, comprises eliminating
PT single-stranded oligonucleotide from the transcription sample.
XX
XX Example 1; SEQ ID NO 7; 26pp; English.
XX
XX The invention relates to amplifying for RNA in a sample comprises
CC eliminating single-stranded oligonucleotide from the transcription
CC sample. The method involves synthesizing single-stranded cDNA by
CC incubating the sample RNA with reverse transcriptase and an
CC oligonucleotide primer that primes synthesis in a direction toward 5' end
CC of the RNA; converting the single-stranded cDNA into double-stranded cDNA
CC to form a transcription sample containing a cDNA template; eliminating
CC single-stranded oligonucleotide from the transcription sample; and
CC transcribing the cDNA template into RNA using an RNA polymerase. The
CC method is useful for improving RNA polymerase based RNA transcription
CC from a polynucleotide template. The method inhibits the undesired non-
CC template derived production of RNA in the transcription reaction.
CC Sequences ADI34483-ADI34489 represent oligonucleotides used in a T7 RNA
CC transcription reaction.
XX
XX Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1
RESULT 1313
ADO04016
ID ADO04016 standard; DNA; 17 BP.
XX
XX AC ADO04016;
XX
XX 29-JUL-2004 (first entry)
XX
XX Annealing primer used to generate single-stranded labelled UNA.
XX
XX Intramolecular base pair; intermolecular base pair;
KW unstructured nucleic acid; UNA; molecular biology;
KW nucleic acid chemistry; polymerase extension reaction; PCR; primer; ss.
XX
XX Unidentified.
XX
XX US2004086880-A1.
XX
XX 06-MAY-2004.
XX
XX 18-DEC-2002; 2002US-00324409.
XX
XX 20-JUL-1999; 99US-00358141.
XX
XX 31-JUL-2000; 2000US-00632639.
XX

PA (SAMP/) SAMPSON J R.
 PA (ACHR/) ACH R A.
 XX (WOLB/) WOLBER P.
 XX Sampson JR, Ach RA, Wolber P;
 XX WPI; 2004-364526/34.
 DR
 XX
 XX Generating nucleic acid having reduced ability to hybridize for use in
 PT molecular biology, comprises providing nucleotide triphosphates to
 PT synthesize nucleic acid complementary to a template nucleic acid.
 XX
 XX Disclosure; SEQ ID NO 16; 74pp; English.
 XX
 CC The present invention provides a system for the production of nucleic
 CC acids with reduced levels of intramolecular base pairing (secondary
 CC structure) and intermolecular base pairing by generating unstructured
 CC nucleic acids (UNAs). The invention is useful for generating nucleic acid
 CC having a reduced ability to hybridize. The invention is also useful in
 CC molecular biology and nucleic acid chemistry. The present sequence is an
 CC annealing primer used to generate single-stranded labelled unstructured
 CC nucleic acid (UNA) by polymerase extension reaction (PCR). This sequence
 CC is used in the invention.
 XX
 XX Sequence 17 BP; 17 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2725
 DB 1 AAAAAAAAAAAAAAAAAA 17
 RESULT 1314
 ADP86178/c
 ID ADP86178 standard; RNA; 17 BP.
 XX AC ADP86178;
 XX 09-SEP-2004 (first entry)
 XX CpG immunostimulatory oligonucleotide #49.
 DE
 XX CpG immunostimulatory oligonucleotide; immune response; allergy; asthma;
 KW viral infection; bacterial infection; cancer; lymphoma;
 KW intraepithelial neoplasm; melanoma; neuroblastoma; Hodgkin's lymphoma;
 KW carcinoma; sarcoma; gene therapy; phosphorothioate; ss.
 XX Unidentified.
 OS
 XX Key Location/Qualifiers
 FH modified_base 1..17
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 XX
 XX WO2004053104-A2.
 XX
 XX 24-JUN-2004.
 XX
 XX 11-DEC-2003; 2003WO-US039775.
 XX
 XX 11-DEC-2002; 2002US-0432409P.
 PR 25-SEP-2003; 2003US-0506108P.
 XX
 XX (COLE-) COLEY PHARM GROUP INC.
 PA (COLE-) COLEY PHARM GMBH.
 XX Krieg AM, Jurk M, Vollmer J, Uhlmann E;
 XX WPI; 2004-487902/46.
 DR

XX
 PT New oligonucleotides, useful for treating allergy or asthma, viral and
 PT bacterial infections, and cancer, e.g. biliary tract cancer, breast
 PT cancer, cervical cancer.
 XX
 XX Example; SEQ ID NO 49; 104pp; English.
 XX
 CC The invention relates to a class of CpG immunostimulatory
 CC oligonucleotides containing a 5' TCG motif or a CG at or the 5' end that
 CC are useful for stimulating an immune response. Oligonucleotides and
 CC compositions of the invention are useful for treating allergy or asthma,
 CC viral and bacterial infections and cancer e.g. biliary tract cancer,
 CC breast cancer, cervical cancer, choriocarcinoma, colon cancer,
 CC endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
 CC liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
 CC neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer, brain
 CC rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
 CC and CNS cancer, connective tissue cancer, esophageal cancer, eye cancer,
 CC Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
 CC testicular cancer, as well as other carcinomas and sarcomas. The
 CC invention is also useful in gene therapy. The present sequence is a CpG
 CC immunostimulatory oligonucleotide.
 XX
 XX Sequence 17 BP; 0 A; 0 C; 0 G; 0 T; 17 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 9.7e+02;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2725
 DB 17 AAAAAAAAAAAAAAAAAA 1
 RESULT 1315
 ADP86137/c
 ID ADP86137 standard; DNA; 17 BP.
 XX AC ADP86137;
 XX 09-SEP-2004 (first entry)
 XX CpG immunostimulatory oligonucleotide #8.
 XX
 KW CpG immunostimulatory oligonucleotide; immune response; allergy; asthma;
 KW viral infection; bacterial infection; cancer; lymphoma;
 KW intraepithelial neoplasm; melanoma; neuroblastoma; Hodgkin's lymphoma;
 KW carcinoma; sarcoma; gene therapy; phosphorothioate; ss.
 XX Unidentified.
 OS
 XX Key Location/Qualifiers
 FH modified_base 1..17
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 XX
 XX WO2004053104-A2.
 XX
 XX 24-JUN-2004.
 XX
 XX 11-DEC-2003; 2003WO-US039775.
 XX
 XX 11-DEC-2002; 2002US-0432409P.
 PR 25-SEP-2003; 2003US-0506108P.
 XX
 XX (COLE-) COLEY PHARM GROUP INC.
 PA (COLE-) COLEY PHARM GMBH.
 XX Krieg AM, Jurk M, Vollmer J, Uhlmann E;
 XX WPI; 2004-487902/46.
 XX


```

PT New oligonucleotides, useful for treating allergy or asthma, viral and
PT bacterial infections, and cancer, e.g. biliary tract cancer, breast
PT cancer, cervical cancer.
XX
PS Example; SEQ ID NO 8; 104pp; English.
PS
XX The invention relates to a class of CpG immunostimulatory
XX oligonucleotides containing a 5' TCG motif or a CG at or the 5' end that
XX are useful for stimulating an immune response. Oligonucleotides and
XX compositions of the invention are useful for treating allergy or asthma,
XX viral and bacterial infections and cancer e.g. biliary tract cancer,
XX breast cancer, cervical cancer, choriocarcinoma, colon cancer,
XX endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
XX liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
XX neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,
XX rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
XX and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,
XX Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
XX testicular cancer, as well as other carcinomas and sarcomas. The
XX invention is also useful in gene therapy. The present sequence is a CpG
XX immunostimulatory oligonucleotide.
XX
SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match      0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1316
AEC07079/c
ID AEC07079 standard; DNA; 17 BP.
XX
AC AEC07079;
XX
XX 17-NOV-2005 (first entry)
XX
XX Poly dT primer SEQ ID NO:3.
XX
XX DNA amplification; hybridization; primer; ss.
XX
XX Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..17
FT /tag= a
FT /note= "phosphorylated poly dT, which binds to a bridging
FT oligonucleotide"
XX
PN US2005202461-A1.
XX
XX 15-SEP-2005.
XX
XX 27-SEP-2004; 2004US-00951549.
XX
XX 08-MAR-2000; 2000US-0187681P.
XX 19-JUL-2000; 2000US-0219397P.
XX 20-SEP-2000; 2000US-0234060P.
XX 13-JAN-2001; 2001US-0261231P.
XX 08-MAR-2001; 2001US-00802162.
XX 19-JUL-2001; 2001US-00908950.
XX 20-SEP-2001; 2001WO-US029589.
XX 14-JAN-2002; 2002US-00050088.
XX 25-MAR-2002; 2002US-0367438P.
XX 20-MAR-2003; 2003US-00393519.
XX 25-MAR-2003; 2003WO-US009232.
XX 08-DEC-2003; 2003US-00730823.
XX 16-APR-2004; 2004US-00825776.
XX

```

```

PA (GETT/) GETTS R C.
PA (KADU/) KADUSHIN J.
PA (SCHW/) SCHWALM J.
PA (HOWE/) HOWERTON K.
XX
PI Getts RC, Kadushin J, Schwalm J, Howerton K;
XX
XX WPI; 2005-618097/63.
XX
XX Assaying the presence of specific nucleic acids sequences using primer
XX oligonucleotides having a first bridging sequence with a primer portion
XX composed of random nucleotides.
XX
XX Disclosure; SEQ ID NO 3; 13pp; English.
XX
XX The invention relates to a method for determining the presence of at
XX least one specific nucleotide sequence in a target nucleic acid extracted
XX from a biological sample comprising preparing a primer oligonucleotide
XX comprising a first bridging sequence with a primer portion composed of
XX random nucleotides attached to one end of the first bridging sequence and
XX a terminations end group attached to the other end. The methods and
XX compositions of the present invention are useful for assaying the
XX presence of specific nucleic acids sequences, particularly for
XX hybridizing nucleic acids in solutions or on surfaces like microarrays,
XX and their amplification using RNA polymerase. The present sequence
XX represents a poly dT primer, which is used in the exemplification of the
XX present invention.
XX
SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;

Query Match      0.6%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 9.7e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1317
AED81285/c
ID AED81285 standard; DNA; 17 BP.
XX
AC AED81285;
XX
XX 26-JAN-2006 (first entry)
XX
XX IL-10 expression assay, test oligonucleotide SEQ ID No.43.
XX
XX pharmaceutical; therapeutic; immune stimulation; immune response;
XX allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
XX immunosuppressive; phosphorothioate; ss.
XX
XX Synthetic.
XX
XX WO2005111057-A2.
XX
XX 24-NOV-2005.
XX
XX 04-APR-2005; 2005WO-US011827.
XX
XX 02-APR-2004; 2004US-0558951P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Vollmer J;
XX
XX WPI; 2005-786756/80.
XX
XX New oligonucleotides, useful for treating an allergy or asthma, or an
XX autoimmune disease, arthritis, systemic lupus erythematosus, multiple
XX sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
XX

```

```
XX PS Example; SEQ ID NO 43; 111pp; English.
XX CC
XX CC The invention relates to an oligonucleotide having the formula: (a) 5'
XX CC XN1Y2N2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
XX CC denotes the 3' end of the oligonucleotide, where X is a T or modified T
XX CC nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
XX CC nucleotide, and N1 and N2 are polynucleotides that do not include a CG
XX CC dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
XX CC polynucleotide consisting of the YZ dinucleotide and the N2
XX CC polynucleotide contains a number of nucleotides that is at most 45% of
XX CC the number of nucleotides in the oligonucleotide; and (b) 5' XN1Y2N2 3'
XX CC where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3'
XX CC end of the oligonucleotide, where X is a T or modified T nucleotide, Y is
XX CC a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
XX CC polynucleotide of 5-10 nucleotides, where N1 does not include a CG
XX CC dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
XX CC a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
XX CC pharmaceutical composition comprising the oligonucleotide in combination
XX CC with a therapeutic agent selected from chemotherapeutic agents,
XX CC radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
XX CC (2) a method of specifically increasing interleukin (IL)-10 expression
XX CC relative to interferon (IFN)-alpha expression in a subject, comprising
XX CC administering an oligonucleotide or a pharmaceutical composition to the
XX CC subject in need of increased IL-10 expression relative to IFN-alpha
XX CC expression; (3) a method of inducing an antigen-specific regulatory T
XX CC cell response in a subject by administering an immunostimulatory nucleic
XX CC acid or composition to a subject exposed to an antigen; (4) a method of
XX CC inducing an antigen-specific regulatory B cell response in a subject by
XX CC administering an immunostimulatory nucleic acid or composition to a
XX CC subject exposed to an antigen; (5) a method of treating an allergy or
XX CC asthma by exposing a subject to an allergen, and administering an
XX CC immunostimulatory nucleic acid or composition to the subject, where the
XX CC immunostimulatory nucleic acid or composition is administered in an
XX CC amount sufficient to prevent or alleviate an allergic response to the
XX CC allergen in the subject; (6) a method of treating an autoimmune disease
XX CC in a subject by exposing a subject to a self antigen, and administering
XX CC an immunostimulatory nucleic acid or composition to the subject, where
XX CC the immunostimulatory nucleic acid or composition is administered in an
XX CC amount sufficient to prevent or treat an autoimmune disease in the
XX CC subject; and (7) a method of reducing an antigen-specific response to an
XX CC implant in a subject by exposing a subject to an implant antigen, and
XX CC administering an immunostimulatory nucleic acid or composition to the
XX CC subject, where the immunostimulatory nucleic acid or composition is
XX CC administered in an amount sufficient to prevent or reduce an antigen-
XX CC specific response to the implant in the subject. The oligonucleotide
XX CC includes at least 1 modified internucleotide linkage such as a
XX CC phosphorothioate linkage. The oligonucleotide, methods and compositions
XX CC of the invention are useful for treating allergies, asthma, autoimmune
XX CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
XX CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
XX CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
XX CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
XX CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
XX CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
XX CC Disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
XX CC hepatitis, immune-mediated diabetes mellitus, Grave's Disease,
XX CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, scleroderma,
XX CC disease of the adrenal gland, rheumatoid arthritis, and ankylosing
XX CC spondylitis, dermatomyositis, spondyloarthropathies such as ankylosing
XX CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
XX CC an infection e.g. Lyme disease. This sequence represents an
XX CC oligonucleotide used in experiments in the examples of the present
XX CC invention.
XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
XX CC
XX CC Query Match 0.6%; Score 17; DB 1; Length 17;
XX CC Best Local Similarity 100.0%; Pred. No. 9.7e+02;
XX CC Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX CC
XX CC 2709 AAAAAAAAAAAAAAAAAA 2725
XX CC |||||||||||||||
XX CC Db 17 AAAAAAAAAAAAAAAAAA 1
XX CC
XX CC RESULT 1319
XX CC AAT94668/c
XX CC ID AAT94668 standard; DNA; 18 BP.
XX CC AC AAT94668;
XX CC DT 27-MAR-1998 (first entry)
XX CC DE Anchored poly(T) oligonucleotide polyT-Anch.
XX CC
XX CC Db 17 AAAAAAAAAAAAAAAAAA 1
XX CC
XX CC RESULT 1318
XX CC AEF82502/c
XX CC ID AEF82502 standard; DNA; 17 BP.
XX CC AC AEF82502;
XX CC DT 20-APR-2006 (first entry)
XX CC DE Common marmoset 18S ribosome PCR primer SEQ ID NO:4.
XX CC KW 18S ribosomal RNA; 18S rRNA; RNA detection; DNA detection; expression;
XX CC SS; PCR; primer.
XX CC OS Synthetic.
XX CC PN JP2006042804-A.
XX CC PD 16-FEB-2006.
XX CC PF 04-MAR-2005; 2005JP-00060329.
XX CC PR 09-JUL-2004; 2004JP-00202891.
XX CC PA (SUMO ) SUMITOMO CHEM CO LTD.
XX CC PI Yamada T, Oeda K;
XX CC DR WPI; 2006-150097/16.
XX CC PT Novel 18S ribosome RNA gene derived from common marmoset, or its partial
XX CC fragment, useful as internal standard for measuring difference in
XX CC expression level of gene of interest in two or more types of test
XX CC samples.
XX CC PS Disclosure; SEQ ID NO 4; 21pp; Japanese.
XX CC
XX CC The invention relates to a novel 18S ribosome RNA gene (I) derived from a
XX CC common marmoset, or its partial fragment (AEF82499). Also claimed is a
XX CC composition for detecting DNA or RNA, comprising the 18S rRNA gene. The
XX CC 18S rRNA gene is useful as an internal standard or a reference of the
XX CC expression level of a gene in the test sample during the measurement of
XX CC the difference in the expression level of a gene of interest in two or
XX CC more types of test sample, based on the difference in the transcription
XX CC product amount of the gene, where the test sample is derived from a
XX CC common marmoset. The transcription product amount of the gene of interest
XX CC is measured using a DNA array or by quantitative reverse transcriptase-
XX CC PCR. The present sequence represents a PCR primer used in the invention
XX CC to synthesise 18S rRNA cDNA.
XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
XX CC
XX CC Query Match 0.6%; Score 17; DB 1; Length 17;
XX CC Best Local Similarity 100.0%; Pred. No. 9.7e+02;
XX CC Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX CC
XX CC 2709 AAAAAAAAAAAAAAAAAA 2725
XX CC |||||||||||||||
XX CC Db 17 AAAAAAAAAAAAAAAAAA 1
XX CC
XX CC RESULT 1319
XX CC AAT94668/c
XX CC ID AAT94668 standard; DNA; 18 BP.
XX CC AC AAT94668;
XX CC DT 27-MAR-1998 (first entry)
XX CC DE Anchored poly(T) oligonucleotide polyT-Anch.
```

KW Flavonoid 3'-hydroxylase; pigmentation; flower colour; transgenic plant;
 KW snapdragon; primer; ss.
 XX Synthetic.
 OS
 PN WO9732023-A1.
 XX
 PD 04-SEP-1997.
 XX
 PF 28-FEB-1997; 97WO-AU000124.
 XX
 PR 01-MAR-1996; 96AU-00008386.
 XX
 PA (FLOR-) FLORIGENE LTD.
 XX
 PI Brugliera F, Holton TA, Michael MZ;
 XX WPI; 1997-448691/41.
 DR
 XX
 XX Novel flavonoid 3'-hydroxylase(s) from flowering plants - and
 PT corresponding DNA, used in the manipulation of pigmentation in plants.
 PT
 XX Example 15; Page 59; 234pp; English.
 PS
 XX Anchored poly(T) oligonucleotides polyT-anchA (AAT94667), polyT-anchC
 CC (AAT94668) and polyT-anchG (AAT94669) are complementary to the upstream
 CC region of a polyadenylation sequence. They were used to prime cDNA
 CC synthesis from snapdragon (Antirrhinum majus) petal and leaf RNA, and
 CC were also utilised in the PCR amplification of plant cytochrome P450
 CC sequences (see also AAT94670-73). A cDNA clone (see AAT94657) encoding
 CC flavonoid 3'-hydroxylase (see AAW35704) was isolated using a differential
 CC display approach. This can be used to manipulate the pigmentation of
 CC transgenic plants
 XX
 SQ Sequence 18 BP; 0 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 2709 AAAAAAAAAAAAAA 2725
 DB |||||||||||||||
 || AAAAAAAAAAAAAA 1
 RESULT 1320
 AAT94669/c
 ID AAT94669 standard; DNA; 18 BP.
 AC AAT94669;
 XX
 DT 27-MAR-1998 (first entry)
 XX
 DE Anchored poly(T) oligonucleotide polyT-anchG.
 XX
 KW Flavonoid 3'-hydroxylase; pigmentation; flower colour; transgenic plant;
 KW snapdragon; primer; ss.
 XX Synthetic.
 OS
 PN WO9732023-A1.
 XX
 PD 04-SEP-1997.
 XX
 PF 28-FEB-1997; 97WO-AU000124.
 XX
 PR 01-MAR-1996; 96AU-00008386.
 XX
 PA (FLOR-) FLORIGENE LTD.
 XX
 PI Brugliera F, Holton TA, Michael MZ;
 XX WPI; 1997-448691/41.
 DR
 XX
 XX Novel flavonoid 3'-hydroxylase(s) from flowering plants - and
 PT corresponding DNA, used in the manipulation of pigmentation in plants.
 PT
 XX Example 15; Page 59; 234pp; English.
 PS
 XX Anchored poly(T) oligonucleotides polyT-anchA (AAT94667), polyT-anchC
 CC (AAT94668) and polyT-anchG (AAT94669) are complementary to the upstream
 CC region of a polyadenylation sequence. They were used to prime cDNA
 CC synthesis from snapdragon (Antirrhinum majus) petal and leaf RNA, and
 CC were also utilised in the PCR amplification of plant cytochrome P450
 CC sequences (see also AAT94670-73). A cDNA clone (see AAT94657) encoding
 CC flavonoid 3'-hydroxylase (see AAW35704) was isolated using a differential
 CC display approach. This can be used to manipulate the pigmentation of
 CC transgenic plants
 XX
 SQ Sequence 18 BP; 0 A; 1 C; 0 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 2709 AAAAAAAAAAAAAA 2725
 DB |||||||||||||||
 || AAAAAAAAAAAAAA 1
 RESULT 1320
 AAT94669/c
 ID AAT94669 standard; DNA; 18 BP.
 AC AAT94669;
 XX
 DT 27-MAR-1998 (first entry)
 XX
 DE Anchored poly(T) oligonucleotide polyT-anchG.
 XX
 KW Flavonoid 3'-hydroxylase; pigmentation; flower colour; transgenic plant;
 KW snapdragon; primer; ss.
 XX Synthetic.
 OS
 PN WO9732023-A1.
 XX
 PD 04-SEP-1997.
 XX
 PF 28-FEB-1997; 97WO-AU000124.
 XX
 PR 01-MAR-1996; 96AU-00008386.
 XX
 PA (FLOR-) FLORIGENE LTD.
 XX
 PI Brugliera F, Holton TA, Michael MZ;
 XX WPI; 1997-448691/41.
 DR

XX Novel flavonoid 3'-hydroxylase(s) from flowering plants - and
 PT corresponding DNA, used in the manipulation of pigmentation in plants.
 XX
 XX Example 15; Page 59; 234pp; English.
 PS
 XX Anchored poly(T) oligonucleotides polyT-anchA (AAT94667), polyT-anchC
 CC (AAT94668) and polyT-anchG (AAT94669) are complementary to the upstream
 CC region of a polyadenylation sequence. They were used to prime cDNA
 CC synthesis from snapdragon (Antirrhinum majus) petal and leaf RNA, and
 CC were also utilised in the PCR amplification of plant cytochrome P450
 CC sequences (see also AAT94670-73). A cDNA clone (see AAT94657) encoding
 CC flavonoid 3'-hydroxylase (see AAW35704) was isolated using a differential
 CC display approach. This can be used to manipulate the pigmentation of
 CC transgenic plants
 XX
 SQ Sequence 18 BP; 0 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 2709 AAAAAAAAAAAAAA 2725
 DB |||||||||||||||
 || AAAAAAAAAAAAAA 1
 RESULT 1321
 AAV54170/c
 ID AAV54170 standard; cDNA; 18 BP.
 XX
 AC AAV54170;
 XX
 DT 21-DEC-1998 (first entry)
 XX
 DE Nucleotide sequence PCR primer 7.
 XX
 KW PCR; primer; amplification; apoptosis; antibody; inhibition; ss;
 KW immunohistological staining.
 XX
 OS Synthetic.
 XX
 PN WO9839437-A1.
 XX
 PD 11-SEP-1998.
 XX
 PF 05-MAR-1998; 98WO-JP000905.
 XX
 PR 05-MAR-1997; 97JP-00050302.
 XX
 PA (KYOW) KYOWA HAKKO KOGYO KK.
 XX
 PI Sakaki Y;
 XX
 DR WPI; 1998-495844/42.
 XX
 PT Novel apoptosis-related DNAs and proteins - for diagnosis, preventing or
 PT treating diseases associated with apoptosis.
 XX
 PS Example 1; Page 49; 70pp; Japanese.
 XX
 XX This is the nucleotide sequence of a PCR primer used in the method of the
 CC invention, involving the use of novel apoptosis-related DNAs and
 CC proteins. The inventions can be used as diagnostic reagents for apoptosis
 CC e.g. (monoclonal) antibodies for the protein, as a reagent in
 CC immunohistological staining, as apoptosis inhibitors. It can also be used
 CC for treatment of apoptosis-related diseases
 XX
 SQ Sequence 18 BP; 1 A; 0 C; 2 G; 15 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY      2707 CTAAGAAAAA 2723
Db      18 CTAAGAAAAA 2

RESULT 1322
AAV37712
ID      AAV37712 standard; cDNA; 18 BP.
XX
AC      AAV37712;
XX
XX      25-MAR-2003 (revised)
DT      07-SEP-1998 (first entry)
XX
XX      Human protein AQ2_1i 3'-portion and polyA tail.
XX
XX      Human; secreted protein; murine adult spleen; human foetal kidney; ovary;
KW      bone marrow; thymus; AE648_1i; AE693_1i; AK438_1i; AK609_1i; AM1060_1i;
KW      AQ2_1i; K433_1i; L256_1i; Prevent; treat; ameliorate; medical; ds.
XX
XX      Homo sapiens.
OS
XX
XX      WO9820130-A2.
PN
XX
XX      14-MAY-1998.
PD
XX
XX      31-OCT-1997; 97WO-US019857.
PF
XX
XX      01-NOV-1996; 96US-00742973.
PR
XX      29-OCT-1997; 97US-00960024.
XX
XX      (GEMY ) GENETICS INST INC.
PA
XX
XX      Jacobs K, McCoy JM, Lavallie ER, Racie LA, Merberg D, Treacy M;
PI      Spaulding V, Agostino MJ;
PI
XX      WPI; 1998-286946/25.
DR
XX
XX      New secreted proteins and associated polynucleotides - obtained from
PT      murine adult spleen, human foetal kidney, human ovary, murine bone marrow
PT      and murine adult thymus.
XX
XX      Disclosure; Page 58; 75pp; English.
XX
XX      The present invention describes novel proteins isolated from cDNA clones:
CC      AE648_1i; AE693_1i; AK438_1i; AK609_1i; AM1060_1i; AQ2_1i; K433_1i; or
CC      L256_1i, deposited as ATCC 98237. The present sequence represents the 3'-
CC      portion of AQ2_1i isolated from a human ovary cDNA library. The proteins
CC      from the present invention may be administered in a composition to
CC      prevent, treat or ameliorate a medical condition. The proteins may
CC      exhibit biological activities such as nutritional activity, cytokine and
CC      cell proliferation/differentiation activity, immune stimulating or
CC      suppressing activity, haematopoiesis regulating activity, tissue growth
CC      activity, activin/inhibin activity, chemotactic/chemokinetic activity,
CC      haemostatic and thrombotic activity, receptor/ligand activity, anti-
CC      inflammatory activity, cadherin/tumour invasion suppressor activity,
CC      tumour inhibition activity and other activities. (Updated on 25-MAR-2003
CC      to correct PR field.)
XX
XX      Sequence 18 BP; 17 A; 0 C; 1 G; 0 T; 0 U; 0 Other;
SQ
Query Match      0.6%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAA 2725
Db      2 AAAAAA 18

RESULT 1323
AAV07750

```

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ID      AAV07750 standard; DNA; 18 BP.
XX
XX      AAV07750;
AC
XX      02-DEC-1998 (first entry)
DT
XX      Phosphorothioate oligodeoxynucleotide.
DE
XX      phosphorothioate; electrospray ionisation-Fourier transform;
KW      mass spectrometry; off-resonance excitation; ss.
KW
XX      Synthetic.
OS
XX      Key      Location/Qualifiers
FH      misc_difference 1..18
FT      /*tag= a
FT      /note= "phosphorothioate internucleotide linkages"
XX
XX      WO9840520-A1.
PN
XX      17-SEP-1998.
PD
XX      12-MAR-1998; 98WO-US004919.
PF
XX      14-MAR-1997; 97US-0040717P.
PR
XX      (HYBR-) HYBRIDON INC.
PA
XX      Wang BH;
PI
XX      WPI; 1998-520830/44.
DR
XX
XX      Determining the nucleotide sequence of a nucleic acid analyte - using
PT      electro-spray ionisation.
PT
XX
XX      Example 1; Fig 3A; 25pp; English.
XX
XX      The invention relates to an analytical method for determining the
CC      nucleotide sequence of nucleic acid analytes, including chemically
CC      modified oligonucleotides. This new method utilises electrospray
CC      ionisation-Fourier transform mass spectrometry. The ions are excited by
CC      sustained off-resonance excitation with single shot excitation, and the
CC      target fragmented by collisionally activated dissociation by a neutral
CC      gas, e.g. carbon dioxide. Alternatively, the excitation and dissociation
CC      can be nozzle skimmer dissociation. The method is used in molecular
CC      biology and biomedical applications. The method, utilising electrospray
CC      ionisation-Fourier transform ion cyclotron resonance mass spectrometry,
CC      is extremely rapid and acts directly on the oligonucleotide. The method
CC      is effective for a variety of nucleic acid analytes, particularly
CC      chemically modified oligonucleotides which have not previously been
CC      successfully sequenced. The present sequence represents a
CC      phosphorothioate oligodeoxynucleotide
XX
XX      Sequence 18 BP; 17 A; 0 C; 0 G; 1 T; 0 U; 0 Other;
SQ
Query Match      0.6%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAA 2725
Db      1 AAAAAA 17

RESULT 1324
AAK18373/c
ID      AAK18373 standard; DNA; 18 BP.
XX
XX      AAK18373;
AC
XX      11-MAY-1999 (first entry)
DT
XX      RT-PCR primer of the invention SEQ ID 14.
DE

```

XX RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
 XX Synthetic.
 XX JPI1032765-A.
 XX 09-FEB-1999.
 XX 18-JUL-1997; 97JP-00208312.
 XX 18-JUL-1997; 97JP-00208312.
 XX (TAKI) TAKARA SHUZO CO LTD.
 XX WPI; 1999-183822/16.
 XX Peptides having at least two new nucleotides - useful as primers in RT-PCR.
 XX
 XX Disclosure; Page 11; 19pp; Japanese.
 XX This sequence represents a primer of the invention. The invention relates to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n = natural number indicating the repetition of alpha; beta, delta = V or N; V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or thymine; gamma = thymine; k = natural number of 3 or over indicating the repetition of gamma, in which thymine expressed by gamma is composed of 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are useful as primers for RT-PCR and determination of base sequences. The new sequences allow for reproductive and highly efficient analysis of gene sequences
 XX
 XX Sequence 18 BP; 1 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
 XX
 XX Query Match 0.6%; Score 17; DB 1; Length 18;
 XX Best Local Similarity 100.0%; Pred. No. 1e+03;
 XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 XX QY 2708 TAAAAAAAAAAAAAAAAA 2724
 XX |||||
 XX Db 17 TAAAAAAAAAAAAAAAAA 1
 XX
 XX RESULT 1326
 XX AAX18372/C
 XX ID AAX18372 standard; DNA; 18 BP.
 XX AC AAX18372;
 XX 11-MAY-1999 (first entry)
 XX RT-PCR primer of the invention SEQ ID 13.
 XX RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
 XX Synthetic.
 XX JPI1032765-A.
 XX 09-FEB-1999.
 XX 18-JUL-1997; 97JP-00208312.
 XX 18-JUL-1997; 97JP-00208312.
 XX (TAKI) TAKARA SHUZO CO LTD.
 XX WPI; 1999-183822/16.
 XX Peptides having at least two new nucleotides - useful as primers in RT-PCR.

XX RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
 XX Synthetic.
 XX JPI1032765-A.
 XX 09-FEB-1999.
 XX 18-JUL-1997; 97JP-00208312.
 XX 18-JUL-1997; 97JP-00208312.
 XX (TAKI) TAKARA SHUZO CO LTD.
 XX WPI; 1999-183822/16.
 XX Peptides having at least two new nucleotides - useful as primers in RT-PCR.

XX RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
 XX Synthetic.
 XX JPI1032765-A.
 XX 09-FEB-1999.
 XX 18-JUL-1997; 97JP-00208312.
 XX 18-JUL-1997; 97JP-00208312.
 XX (TAKI) TAKARA SHUZO CO LTD.
 XX WPI; 1999-183822/16.
 XX Peptides having at least two new nucleotides - useful as primers in RT-PCR.

PT PCR.
 PS Disclosure; Page 11; 19pp; Japanese.
 XX This sequence represents a primer of the invention. The invention relates to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n = natural number indicating the repetition of alpha; beta, delta = V or N; V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or thymine; gamma = thymine; k = natural number of 3 or over indicating the repetition of gamma, in which thymine expressed by gamma is composed of 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are useful as primers for RT-PCR and determination of base sequences. The new sequences allow for reproductive and highly efficient analysis of gene sequences
 XX
 XX Sequence 18 BP; 2 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
 XX
 XX Query Match 0.6%; Score 17; DB 1; Length 18;
 XX Best Local Similarity 100.0%; Pred. No. 1e+03;
 XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 XX QY 2708 TAAAAAAAAAAAAAAAAA 2724
 XX |||||
 XX Db 17 TAAAAAAAAAAAAAAAAA 1
 XX
 XX RESULT 1326
 XX AAA40563
 XX ID AAA40563 standard; cDNA; 18 BP.
 XX AC AAA40563;
 XX 16-NOV-2000 (first entry)
 XX Human adult ovary cDNA fragment AQ2_11 #2.
 XX Secreted protein; cytostatic; immunostimulatory; antimicrobial;
 XX antiviral; immunosuppressive; antiinflammatory; vulnery; cytokine;
 XX cell proliferation; differentiation; regulator; treatment; tumor;
 XX autoimmune disease; inflammatory disorder; wound; microbial infection;
 XX viral disease; graft versus host reaction suppression; ss.
 XX Homo sapiens.
 XX WO200037630-A1.
 XX 29-JUN-2000.
 XX 22-DEC-1999; 99WO-US031005.
 XX 23-DEC-1998; 98US-00220876.
 XX (GEMY) GENETICS INST INC.
 XX Jacobs K, Mccoy JM, Lavallie ER, Collins-Racie LA, Evans C;
 XX Merberg D, Treacy M, Bowman MR;
 XX WPI; 2000-442661/38.
 XX P-PSDB; AAB10274.
 XX Secreted human proteins AS296-1i and AS34-1i, useful for treating tumors, autoimmune diseases, inflammatory disorders, wounds, microbial infections and viral diseases.
 XX Disclosure; Page 269; 293pp; English.
 XX This invention describes novel secreted human proteins (I) which have cytostatic, immunostimulatory, antimicrobial, antiviral, immunosuppressive, antiinflammatory and vulnery activity and which act as cytokine, cell proliferation or differentiation regulators. (I) is useful for treating tumors, autoimmune diseases, inflammatory disorders,

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CC wounds, microbial infections and viral diseases. (I) is also useful for
CC suppressing graft versus host reaction. AAA0490-A40580 represent cDNA
CC fragments that encode the secreted proteins AAB10226-B10288 described in
CC the method of the invention
XX
SQ Sequence 18 BP; 17 A; 0 C; 1 G; 0 T; 0 U; 0 Other;

Query Match          0.6%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 2 AAAAAAAAAAAAAAAAAA 18

RESULT 1327
AAZ90640/c
ID AAZ90640 standard; DNA; 18 BP.
XX
AC AAZ90640;
XX
DT 13-JUN-2000 (first entry)
XX
DE Human adipose tissue gene amplifying primer #1.
XX
KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN JP2000037190-A.
XX
PD 08-FEB-2000.
XX
PF 23-JUL-1998; 98JP-00225228.
XX
PR 23-JUL-1998; 98JP-00225228.
XX
PA (NISR ) JAPAN TOBACCO INC.
XX
WPI; 2000-306578/27.
XX
A physiologically active protein specifically derived from mammal tissue.
XX
Example 2; Page 18; 50pp; Japanese.
XX
The invention relates to identification of genes and proteins of adipose
XX tissue relating to obesity, particularly complications of visceral
XX obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
XX hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
XX proteins (AAZ90634-636) are used in the genetic diagnosis, prevention
XX and treatment of adipose tissue related diseases. Sequences AAZ90640-51
XX represent PCR primers amplifying the human adipose tissue genes
XX
SQ Sequence 18 BP; 1 A; 0 C; 2 G; 15 T; 0 U; 0 Other;

Query Match          0.6%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAA 2723
Db 18 CTAATAAAAAAAAAAAAA 2

RESULT 1328
AAD20091
ID AAD20091 standard; mRNA; 18 BP.
XX
AC AAD20091;
XX
DT 03-JAN-2002 (first entry)

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XX mRNA fragment used in 3' end PCR/IVT method of the invention.
DE RNA polymerase; RNAP; RNA detection; IVT; in vitro transcription; ss.
XX RNA polymerase; RNAP; RNA detection; IVT; in vitro transcription; ss.
XX Unidentified.
XX US6271002-B1.
XX 07-AUG-2001.
XX 04-OCT-1999; 99US-00411074.
XX 04-OCT-1999; 99US-00411074.
XX (ROSE-) ROSETTA INPHARMATICS INC.
XX Linsley PS, Schelter JW;
XX WPI; 2001-624273/72.
XX Amplifying and detecting RNA derived from a population of cells by
XX employing a primer that contains an RNA polymerase promoter in a
XX polymerase chain reaction.
XX Example 3; Fig 1; 29pp; English.
XX The invention relates to methods and kits for amplification of mRNA using
XX a primer in PCR that contains an RNA polymerase (RNAP) promoter. The
XX invention provides methods for amplification and detection of RNA derived
XX from a population of cells, preferably eukaryotic cells and most
XX preferably mammalian cells, which methods preserve fidelity with respect
XX to sequence and transcript representation and additionally enable
XX amplification of extremely small amounts of mRNA. The method and kit are
XX useful for amplifying and detecting RNA derived from a population of
XX cells, especially eukaryotic cells like mammals. The RNAs generated are
XX useful for profiling gene expression in different populations of cells.
XX The present sequence is a mRNA fragment used in 3' end PCR/IVT (in vitro
XX transcription) method of the invention
XX
SQ Sequence 18 BP; 17 A; 0 C; 0 G; 0 T; 0 U; 1 Other;

Query Match          0.6%; Score 17; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 2 AAAAAAAAAAAAAAAAAA 18

RESULT 1329
ADK69542/c
ID ADK69542 standard; DNA; 18 BP.
XX
AC ADK69542;
XX
DT 21-APR-2005 (first entry)
XX
DE Monocotyledon transformation associated PCR primer SEQ ID NO 11.
XX ss; PCR; primer; transformation; plant.
XX Synthetic.
XX KR2004036041-A.
XX 30-APR-2004.
XX 23-OCT-2002; 2002KR-00064822.
XX 23-OCT-2002; 2002KR-00064822.
XX

```

PA (POST-) POSTECH FOUND.
 XX Ahn SY, An GH, An KS, Jung DH, Kang HG, Mun SO;
 XX WPI; 2004-589679/57.
 XX Preparing transformed monocotyledon rice, with t-DNA tagging vector
 PT comprising enhancer element for activation tagging and reporter gene for
 PT gene trapping.
 XX Disclosure; SEQ ID NO 11; 17bp; Korean.
 XX The invention relates to a method of preparing transformed
 CC monocotyledons. The present sequence represents a Monocotyledon
 CC transformation associated PCR primer.
 XX
 XX Sequence 18 BP; 1 A; 1 C; 1 G; 15 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 17; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2707 CTAAGAAAAA 2723
 DB 17 CTAAGAAAAA 1
 RESULT 1330
 AAQ75558/c
 ID AAQ75558 standard; DNA; 19 BP.
 AC AAQ75558;
 XX
 XX 04-AUG-1995 (first entry)
 DE Reverse transcription primer used in cDNA analysis technique.
 XX Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX Synthetic.
 OS JP06303997-A.
 XX
 XX 01-NOV-1994.
 XX 16-APR-1993; 93JP-00112515.
 XX 16-APR-1993; 93JP-00112515.
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 XX
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 5; 11pp; Japanese.
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESSEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 19 BP; 0 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAA 2725
 DB 17 AAAAAAAAAA 1
 RESULT 1332
 ABD24924
 ID ABD24924 standard; DNA; 19 BP.
 XX
 XX ABD24924;
 XX
 XX 29-JUL-2004 (first entry)
 DT
 XX AI095492-derived oligonucleotide SEQ ID 3936.
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 XX
 SQ Sequence 19 BP; 0 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAA 2725
 DB 17 AAAAAAAAAA 1
 RESULT 1331
 AAQ75550/c
 ID AAQ75550 standard; DNA; 19 BP.
 XX
 XX AAQ75550;
 XX
 XX 04-AUG-1995 (first entry)
 DE Reverse transcription primer used in cDNA analysis technique.
 XX Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.
 XX Synthetic.
 OS JP06303997-A.
 XX
 XX 01-NOV-1994.
 XX 16-APR-1993; 93JP-00112515.
 XX 16-APR-1993; 93JP-00112515.
 XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
 XX WPI; 1995-018287/03.
 XX
 XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 5; 11pp; Japanese.
 XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESSEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily
 XX
 SQ Sequence 19 BP; 0 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 17; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAA 2725
 DB 17 AAAAAAAAAA 1
 RESULT 1332
 ABD24924
 ID ABD24924 standard; DNA; 19 BP.
 XX
 XX ABD24924;
 XX
 XX 29-JUL-2004 (first entry)
 DT
 XX AI095492-derived oligonucleotide SEQ ID 3936.
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; anti-allergic; anti-inflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 XX

KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

OS Homo sapiens.

XX WO200285309-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.

XX 24-APR-2001; 2001US-0286036P.

XX (EPIC-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense

PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX Claim 15; SEQ ID NO 3936; 763pp; English.

CC This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.

CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc., tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX Sequence 19 BP; 16 A; 0 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2724

|||||||

Db 3 TAAAAAATAAAAAAAAAA 19

RESULT 1333

AAQ75574/c

ID AAQ75574 standard; DNA; 20 BP.

XX AAQ75574;
 AC
 XX
 DT 04-AUG-1995 (first entry)
 XX

DE Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX WPI; 1995-018287/03.

XX Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.
 XX Disclosure; Page 5; 11pp; Japanese.

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

SQ Sequence 20 BP; 0 A; 2 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725

|||||||

Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1334

AAQ75605/c

ID AAQ75605 standard; DNA; 20 BP.

XX AAQ75605;

XX 04-AUG-1995 (first entry)

DE Reverse transcription primer used in cDNA analysis technique.

XX Analysis; gene expression; reverse transcription; primer; cDNA;
 KW aggregate; restriction enzyme; ss.

XX Synthetic.

XX JP06303997-A.

XX 01-NOV-1994.

XX 16-APR-1993; 93JP-00112515.

XX 16-APR-1993; 93JP-00112515.

XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.


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XX DR WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 20 BP; 0 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2725
XX Db | | | | | | | | | | | | | | | |
XX 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1335
XX AAQ75572/c
XX ID AAQ75572 standard; DNA; 20 BP.
XX AC
XX AAQ75572;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; Gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX JF06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2725
XX Db | | | | | | | | | | | | | | | |
XX 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1337
XX AAQ75573/c
XX ID AAQ75573 standard; DNA; 20 BP.
XX AC
XX AAQ75573;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; Gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.

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Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db | | | | | | | | | | | | | | | |
17 AAAAAAAAAAAAAAAAAA 1
RESULT 1336
AAQ75604/c
ID AAQ75604 standard; DNA; 20 BP.
XX
XX AAQ75604;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; Gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX JF06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX
XX PS Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX
XX SQ Sequence 20 BP; 1 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2709 AAAAAAAAAAAAAAAAAA 2725
XX Db | | | | | | | | | | | | | | | |
XX 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1337
XX AAQ75573/c
XX ID AAQ75573 standard; DNA; 20 BP.
XX AC
XX AAQ75573;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; Gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.

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XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 0 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 1338
AAQ75606/c
ID AAQ75606 standard; DNA; 20 BP.
XX
XX AAQ75606;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 0 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 1340
AAQ75571/c
ID AAQ75571 standard; DNA; 20 BP.
XX
XX AAQ75571;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)

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CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 0 A; 3 C; 0 G; 17 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 1339
AAQ75603/c
ID AAQ75603 standard; DNA; 20 BP.
XX
XX AAQ75603;
AC
XX
XX 04-AUG-1995 (first entry)
DT
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
OS
XX
XX JP06303997-A.
PN
XX
XX 01-NOV-1994.
PD
XX
XX 16-APR-1993; 93JP-00112515.
PF
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 0 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
SQ
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAAAA 1
XX
RESULT 1340
AAQ75571/c
ID AAQ75571 standard; DNA; 20 BP.
XX
XX

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AC AAQ75571;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 5; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 20 BP; 0 A; 1 C; 2 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1341
ABQ79871/c
ID ABQ79871 standard; DNA; 20 BP.
XX
XX AC ABQ79871;
XX
XX 23-DEC-2002 (first entry)
XX
XX Nucleotide sequence of a PCR primer #1.
XX
XX Polymerase chain reaction; thermal cycle; immobilisation;
XX Genetic engineering; PCR; primer; ss.
XX
XX Synthetic.
XX
XX JP2002191369-A.
XX
XX 09-JUL-2002.
XX
XX 27-DEC-2000; 2000JP-00399573.
XX
XX 27-DEC-2000; 2000JP-00399573.
XX
XX (TOJO) TOYO KOHAN CO LTD.
XX (TAKA) TAKAHASHI K.

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XX WPI; 2002-630904/68.
XX
XX Carrying out a thermal cycle of polymerase chain reaction (PCR) by using
XX a substrate on which a DNA is immobilized used in medical, biochemical,
XX molecular biological and gene engineering fields.
XX
XX Example; Page 9; 13pp; Japanese.
XX
XX The invention relates to performing a thermal cycle of PCR by using a
XX substrate on which a deoxyribonucleic acid (DNA) is immobilized. The
XX method is useful in the medical, biochemical, molecular biological and
XX genetic engineering fields. Sequences ABQ79871-881 represent PCR primers
XX used in the method of the invention
XX
XX Sequence 20 BP; 3 A; 0 C; 0 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 20 AAAAAAAAAAAAAAAAAA 4

RESULT 1342
ABA05917/c
ID ABA05917 standard; DNA; 20 BP.
XX
XX AC ABA05917;
XX
XX 05-MAR-2002 (first entry)
XX
XX Hepatitis B virus diagnostic PCR primer SEQ ID NO 7.
XX
XX Hepatitis B virus; HBV; infection; hepatocellular carcinoma; diagnosis;
XX PCR primer; ss.
XX
XX Hepatitis B virus.
XX
XX EP1152063-A1.
XX
XX 07-NOV-2001.
XX
XX 03-MAY-2000; 2000EP-00109436.
XX
XX 03-MAY-2000; 2000EP-00109436.
XX
XX (DEKR-) DEUT KREBSFORSCHUNGSZENTRUM.
XX
XX Schroeder KH, Koike K;
XX
XX WPI; 2002-068256/10.
XX
XX Diagnosing hepatitis B virus (HBV) infection stages and determining the
XX risk for hepatocellular carcinoma, comprises identifying full length HBV
XX transcripts and truncated HBV transcripts in a serum sample.
XX
XX Example 1; Page 6; 25pp; English.
XX
XX The invention relates to diagnosis of hepatitis B virus (HBV) infection
XX stages comprising identification of full length HBV transcripts (I) and
XX truncated HBV transcripts (II) in a serum sample, where the ratio of I:II
XX is indicative of a particular infection stage. The method is useful for
XX diagnosing HBV infection stages and determining the risk for developing
XX hepatocellular carcinoma. The present sequence is that of a HBV
XX diagnostic PCR primer, useful for the invention
XX
XX Sequence 20 BP; 1 A; 2 C; 1 G; 16 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 20;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;

```

Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2723
DB 17 CTAATAAAAAAAAAAAAAA 1

RESULT 1343
ABZ89896
ID ABZ89896 standard; DNA; 20 BP.
XX
AC ABZ89896;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 5138; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 4 AAAAAAAAAAAAAAAAAA 20

RESULT 1344
ABZ89703
ID ABZ89703 standard; DNA; 20 BP.
XX
AC ABZ89703;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 4945; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 16 A; 0 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAA 2723
DB 4 CTAATAAAAAAAAAAAAA 20

RESULT 1347
ABD25949/C
ID ABD25949 standard; DNA; 20 BP.
AC ABD25949;
XX
XX
DT 29-JUL-2004 (first entry)
XX
DE AA96703-derived oligonucleotide SEQ ID 4961.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
OS
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
XX 23-APR-2002; 2002WO-US013143.
PF
XX 24-APR-2001; 2001US-0286036P.
PR
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
DR
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4961; 763pp; English.
PS
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary

CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 2 A; 1 C; 0 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 19 AAAAAAAAAAAAAAAAAA 3

RESULT 1348
ABD25244
ID ABD25244 standard; DNA; 20 BP.
XX
AC ABD25244;
XX
XX 29-JUL-2004 (first entry)
DT
XX
DE AI051839-derived oligonucleotide SEQ ID 4256.
XX
XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
XX Homo sapiens.
OS
XX
PN WO200285309-A2.
XX
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US013143.
PF
XX 24-APR-2001; 2001US-0286036P.
PR
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-093058/08.
DR
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 4256; 763pp; English.
PS
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 16 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2723
 |||||
 Db 4 CTAATAAAAAAAAAAAAAA 20

RESULT 1349

ABD26126
 ID ABD26126 standard; DNA; 20 BP.

XX AC ABD26126;

XX DT 29-JUL-2004 (first entry)

XX DE AA463249-derived oligonucleotide SEQ ID 5138.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 KW pulmonary transplantation rejection; ss; primer.

XX OS Homo sapiens.

XX XX WO200285309-A2.

XX PD 31-OCT-2002.

XX PF 23-APR-2002; 2002WO-US013143.

XX PR 24-APR-2001; 2001US-0286036P.

XX PA (EPIG-) EPIGENESIS PHARM INC.

XX NYce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;

XX DR WPI; 2003-093058/08.

XX Pharmaceutical composition for treating asthma, has antisense
 PT oligonucleotide containing less percentage of adenosine, targeted to
 PT nucleic acids associated with lung airway or lung dysfunction, and
 PT bronchodilating agent.

XX PS Claim 15; SEQ ID NO 5138; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
 CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 XX
 SQ Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
 |||||
 Db 4 AAAAAAAAAAAAAAAAAA 20

RESULT 1350

ADH67409/c

ID ADH67409 standard; DNA; 20 BP.

XX AC ADH67409;

XX DT 25-MAR-2004 (first entry)

XX DE Human glucocorticoid receptor-specific antisense oligonucleotide #4243.

XX KW antisense oligonucleotide; glucocorticoid receptor; infection;

XX KW inflammation; tumour formation; diabetes; obesity;

XX KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;

XX KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX OS Homo sapiens.

XX PN WO2003099215-A2.

XX PD 04-DEC-2003.

XX PF 20-MAY-2003; 2003WO-US016084.

XX PR 20-MAY-2002; 2002US-0381857P.

XX PA (PHAA) PHARMACIA CORP.

XX PI Crosby SD, Nalseth AE;

XX DR WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
XX Claim 4; SEQ ID NO 4243; 985pp; English.
XX
CC The invention comprises an antisense oligonucleotides that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: the present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
XX Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 20 AAAAAAAAAAAAAAAAAA 4
RESULT 1351
ADK75123/C
ID ADK75123 standard; DNA; 20 BP.
XX
XX ADK75123;
XX
XX 20-MAY-2004 (first entry)
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #2457.
XX
XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
XX Synthetic.
XX
XX WO2004016754-A2.
XX
XX 26-FEB-2004.
XX
XX 14-AUG-2003; 2003WO-US025465.
XX
XX 14-AUG-2002; 2002US-0403416P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Roberts SL;
XX
XX WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 2457; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate

CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
XX Sequence 20 BP; 1 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 17; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1
RESULT 1352
ADK74838/C
ID ADK74838 standard; DNA; 20 BP.
XX
XX ADK74838;
XX
XX 20-MAY-2004 (first entry)
XX
XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #2172.
XX
XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
XX Synthetic.
XX
XX WO2004016754-A2.
XX
XX 26-FEB-2004.
XX
XX 14-AUG-2003; 2003WO-US025465.
XX
XX 14-AUG-2002; 2002US-0403416P.
XX
XX (PHAA) PHARMACIA CORP.
XX
XX Roberts SL;
XX
XX WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 2172; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
XX Sequence 20 BP; 1 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 17; DB 1; Length 20;
Query Match 0.6%; Score 17; DB 1; Length 20;


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Best Local Similarity 100.0%; Pred. No. 1e+03; Mismatches 0; Indels 0; Gaps 0;
Matches 17; Conservative 0;

Oy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 20 AAAAAAAAAAAAAAAAAA 4

RESULT 1353
AAQ75670/c
ID AAQ75670 standard; DNA; 21 BP.
XX
AC AAQ75670;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 3 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1354
AAQ75795/c
ID AAQ75795 standard; DNA; 21 BP.
XX
AC AAQ75795;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
XX

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OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 3 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1355
AAQ75661/c
ID AAQ75661 standard; DNA; 21 BP.
XX
AC AAQ75661;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 6; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of

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CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 1 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1
RESULT 1356
AAQ75669/c
ID AAQ75669 standard; DNA; 21 BP.
XX
AC AAQ75669;
XX
AC
XX
DT 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;
Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1
RESULT 1357
AAQ75798/c
ID AAQ75798 standard; DNA; 21 BP.

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XX AAQ75798;
XX AC
XX DT 04-AUG-1995 (first entry)
XX DE Reverse transcription primer used in cDNA analysis technique.
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX XX WPI; 1995-018287/03.
XX XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 0 A; 4 C; 0 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1
RESULT 1358
AAQ75668/c
ID AAQ75668 standard; DNA; 21 BP.
XX
AC AAQ75668;
XX
DT 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX KW aggregate; restriction enzyme; ss.
XX OS Synthetic.
XX PN JP06303997-A.
XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX

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XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 2709 AAAAAAAAAAAAAAAAAA 2725
XX |||||
XX Db 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1359
XX AAQ75794/c
XX ID AAQ75794 standard; DNA; 21 BP.
XX
XX AC AAQ75794;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX DT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX DE Disclosure; Page 6; 11pp; Japanese.
XX
XX KW A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 3 C; 0 G; 18 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX
XX 2709 AAAAAAAAAAAAAAAAAA 2725
XX |||||
XX Db 17 AAAAAAAAAAAAAAAAAA 1
XX
XX RESULT 1361
XX AAQ75667/c
XX ID AAQ75667 standard; DNA; 21 BP.
XX
XX AC AAQ75667;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.

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Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1
RESULT 1360
AAQ75660/c
ID AAQ75660 standard; DNA; 21 BP.
XX
XX AC AAQ75660;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.
XX
XX PN JP06303997-A.
XX
XX PD 01-NOV-1994.
XX
XX PF 16-APR-1993; 93JP-00112515.
XX
XX PR 16-APR-1993; 93JP-00112515.
XX
XX PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX DR WPI; 1995-018287/03.
XX
XX DT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX DE Disclosure; Page 6; 11pp; Japanese.
XX
XX KW A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 1 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 17; DB 1; Length 21;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1
RESULT 1361
AAQ75667/c
ID AAQ75667 standard; DNA; 21 BP.
XX
XX AC AAQ75667;
XX
XX DT 04-AUG-1995 (first entry)
XX
XX DE Reverse transcription primer used in cDNA analysis technique.
XX
XX KW Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX
XX OS Synthetic.

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XX JP06303997-A.
PN
XX
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX
XX Disclosure; Page 7; 11pp; Japanese.
PS
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 2 C; 2 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1362
AAQ75786/c
ID AAQ75786 standard; DNA; 21 BP.
XX
XX AAQ75786;
AC
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX
XX Disclosure; Page 9; 11pp; Japanese.
PS
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1362
AAQ75786/c
ID AAQ75786 standard; DNA; 21 BP.
XX
XX AAQ75786;
AC
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX
XX Disclosure; Page 9; 11pp; Japanese.
PS
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1364
AAQ75791/c
ID AAQ75791 standard; DNA; 21 BP.
XX
XX

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CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 3 C; 1 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1363
AAQ75788/c
ID AAQ75788 standard; DNA; 21 BP.
XX
XX AAQ75788;
AC
XX 04-AUG-1995 (first entry)
DT
XX Reverse transcription primer used in cDNA analysis technique.
DE
XX Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX Synthetic.
OS
XX JP06303997-A.
PN
XX 01-NOV-1994.
PD
XX 16-APR-1993; 93JP-00112515.
PF
XX 16-APR-1993; 93JP-00112515.
PR
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
PA
XX WPI; 1995-018287/03.
DR
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
PT
XX
XX Disclosure; Page 9; 11pp; Japanese.
PS
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 2 A; 2 C; 0 G; 17 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1364
AAQ75791/c
ID AAQ75791 standard; DNA; 21 BP.
XX
XX

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QY      2709 AAAAAAAAAAAAAAAAAA 2725
DB      17 AAAAAAAAAAAAAAAAAA 1

RESULT 1367
AAQ75796/C
ID      AAQ75796 standard; DNA; 21 BP.
XX
AC      AAQ75796;
XX
DT      04-AUG-1995 (first entry)
XX
DE      Reverse transcription primer used in cDNA analysis technique.
XX
KW      Analysis; gene expression; reverse transcription; primer; cDNA;
KW      aggregate; restriction enzyme; ss.
XX
OS      Synthetic.
XX
PN      JP06303997-A.
XX
PD      01-NOV-1994.
XX
PF      16-APR-1993; 93JP-00112515.
XX
PR      16-APR-1993; 93JP-00112515.
XX
PA      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
WPI; 1995-018287/03.
XX
Analysis of cDNA and gene expression - by amplification of mRNA followed
by digestion with restriction enzymes.
XX
PS      Disclosure; Page 9; 11pp; Japanese.
XX
A method for the analysis of cDNA comprises (a) preparing an aggregate of
double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
and using the aggregate of mRNAs as the template for each reverse
transcription primer; (b) digesting each of the prepared aggregates of
the double-stranded cDNAs with restriction enzyme and; (c)
electrophoresing the digested aggregate of cDNAs in separate lanes. The
method can be used to analyse gene expression rapidly and easily
XX
SQ      Sequence 21 BP; 0 A; 3 C; 0 G; 18 T; 0 U; 0 Other;
Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAAAAAAAAAAAAAA 2725
DB      17 AAAAAAAAAAAAAAAAAA 1

RESULT 1369
AAQ75790/C
ID      AAQ75790 standard; DNA; 21 BP.
XX
AC      AAQ75790;
XX
DT      04-AUG-1995 (first entry)
XX
DE      Reverse transcription primer used in cDNA analysis technique.
XX
KW      Analysis; gene expression; reverse transcription; primer; cDNA;
KW      aggregate; restriction enzyme; ss.
XX
OS      Synthetic.
XX
PN      JP06303997-A.
XX
PD      01-NOV-1994.
XX
PF      16-APR-1993; 93JP-00112515.
XX
PR      16-APR-1993; 93JP-00112515.
XX
PA      (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
WPI; 1995-018287/03.
XX
Analysis of cDNA and gene expression - by amplification of mRNA followed
by digestion with restriction enzymes.
XX
PS      Disclosure; Page 9; 11pp; Japanese.
XX
A method for the analysis of cDNA comprises (a) preparing an aggregate of
double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
and using the aggregate of mRNAs as the template for each reverse
transcription primer; (b) digesting each of the prepared aggregates of
the double-stranded cDNAs with restriction enzyme and; (c)
electrophoresing the digested aggregate of cDNAs in separate lanes. The
method can be used to analyse gene expression rapidly and easily
XX
SQ      Sequence 21 BP; 1 A; 3 C; 0 G; 17 T; 0 U; 0 Other;
Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      2709 AAAAAAAAAAAAAAAAAA 2725
DB      17 AAAAAAAAAAAAAAAAAA 1

RESULT 1368
AAQ75797/C
ID      AAQ75797 standard; DNA; 21 BP.
XX
AC      AAQ75797;
XX
DT      04-AUG-1995 (first entry)
XX
DE      Reverse transcription primer used in cDNA analysis technique.
XX
KW      Analysis; gene expression; reverse transcription; primer; cDNA;
KW      aggregate; restriction enzyme; ss.
XX
OS      Synthetic.
XX

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CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 3 C; 0 G; 17 T; 0 U; 0 Other;

Query Match          0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1370
AAQ75656/c
ID AAQ75656 standard; DNA; 21 BP.
XX
AC AAQ75656;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
KW Analysis; gene expression; reverse transcription; primer; cDNA;
KW aggregate; restriction enzyme; ss.
XX
OS Synthetic.
XX
PN JP06303997-A.
XX
PD 01-NOV-1994.
XX
PF 16-APR-1993; 93JP-00112515.
XX
PR 16-APR-1993; 93JP-00112515.
XX
PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
DR WPI; 1995-018287/03.
XX
PT Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
PS Disclosure; Page 9; 11pp; Japanese.
XX
CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
SQ Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;

Query Match          0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1371
AAQ75784/c
ID AAQ75784 standard; DNA; 21 BP.
XX
AC AAQ75784;

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XX 04-AUG-1995 (first entry)
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
XX by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX labelled reverse transcription primers (GENESQ files AAQ75547-Q75798)
XX and using the aggregate of mRNAs as the template for each reverse
XX transcription primer; (b) digesting each of the prepared aggregates of
XX the double-stranded cDNAs with restriction enzyme and; (c)
XX electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 2 C; 1 G; 17 T; 0 U; 0 Other;

Query Match          0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1372
AAQ75666/c
ID AAQ75666 standard; DNA; 21 BP.
XX
AC AAQ75666;
XX
DT 04-AUG-1995 (first entry)
XX
DE Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.

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XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 7; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 0 A; 2 C; 1 G; 18 T; 0 U; 0 Other;
SQ
    Query Match      0.6%; Score 17; DB 1; Length 21;
    Best Local Similarity 100.0%; Pred. No. 1.1e+03;
    Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1373
AAQ75658/c
ID AAQ75658 standard; DNA; 21 BP.
XX
AC AAQ75658;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX
XX JP06303997-A.
XX
XX 01-NOV-1994.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX 16-APR-1993; 93JP-00112515.
XX
XX (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX
XX WPI; 1995-018287/03.
XX
XX Analysis of cDNA and gene expression - by amplification of mRNA followed
PT by digestion with restriction enzymes.
XX
XX Disclosure; Page 9; 11pp; Japanese.
XX
XX A method for the analysis of cDNA comprises (a) preparing an aggregate of
CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
CC and using the aggregate of mRNAs as the template for each reverse
CC transcription primer; (b) digesting each of the prepared aggregates of
CC the double-stranded cDNAs with restriction enzyme and; (c)
CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
CC method can be used to analyse gene expression rapidly and easily
XX
XX Sequence 21 BP; 1 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
SQ
    Query Match      0.6%; Score 17; DB 1; Length 21;
    Best Local Similarity 100.0%; Pred. No. 1.1e+03;
    Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1375
AAQ75783/c
ID AAQ75783 standard; DNA; 21 BP.
XX
AC AAQ75783;
XX
XX 04-AUG-1995 (first entry)
XX
XX Reverse transcription primer used in cDNA analysis technique.
XX
XX Analysis; gene expression; reverse transcription; primer; cDNA;
XX aggregate; restriction enzyme; ss.
XX Synthetic.
XX
XX JP06303997-A.

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XX PD 01-NOV-1994.
XX PF 16-APR-1993; 93JP-00112515.
XX PR 16-APR-1993; 93JP-00112515.
XX PA (NITE ) NIPPON TELEGRAPH & TELEPHONE CORP.
XX DR WPI; 1995-018287/03.
XX PT Analysis of cDNA and gene expression - by amplification of mRNA followed
XX PT by digestion with restriction enzymes.
XX PS Disclosure; Page 9; 11pp; Japanese.
XX CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
XX CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
XX CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
XX CC and using the aggregate of mRNAs as the template for each reverse
XX CC transcription primer; (b) digesting each of the prepared aggregates of
XX CC the double-stranded cDNAs with restriction enzyme and; (c)
XX CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
XX CC method can be used to analyse gene expression rapidly and easily
XX SQ Sequence 21 BP; 0 A; 2 C; 2 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAA 1

RESULT 1376
ID ADW84561/c
XX ADW84561 standard; DNA; 21 BP.
XX AC ADW84561;
XX 07-APR-2005 (first entry)
XX DE MAP3K9 marker amplification reverse primer #1057.
XX KW mixed lineage kinase; MLK; asthma; at-risk haplotype; MAP3K9;
XX KW antiaethmatic; respiratory-gen.; antiinflammatory; antirheumatic;
XX KW antiarthritic; antipsoriatic; neuroprotective; gastrointestinal-gen.;
XX KW respiratory disease; chronic obstructive pulmonary disease;
XX KW chronic bronchitis; inflammation; ss; primer; PCR.
XX OS Unidentified.
XX PN WO2005007144-A2.
XX PD 27-JAN-2005.
XX PF 14-JUL-2004; 2004WO-US022446.
XX PR 14-JUL-2003; 2003US-0487072P.
XX PR 05-APR-2004; 2004US-0559611P.
XX PA (DECO-) DECODE GENETICS EHF.
XX PI Hakonarson H, Gurney ME, Halapi E;
XX DR WPI; 2005-122681/13.
XX PT Use of mixed lineage kinase family kinase inhibitor in the manufacture of
XX PT a medicament for treatment of asthma associated at-risk haplotype for
XX PT asthma, at-risk haplotype in MAP3K9 gene or increased MLK1 protein
XX PT expression or activity.

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XX Disclosure; Fig 12; 640pp; English.
XX PS The invention relates to the novel use of a mixed lineage kinase (MLK)
XX CC family kinase inhibitor for treating asthma. Where the asthma is
XX CC associated with a risk factor selected from an at-risk haplotype for
XX CC asthma, at-risk haplotype in MAP3K9 gene, polymorphism in MAP3K9 nucleic
XX CC acid, dysregulation of MAP3K9 mRNA expression, dysregulation of a MAP3K9
XX CC mRNA isoform, and/or increased MLK1 protein expression. The invention
XX CC further comprises: a method for the diagnosis or identification of
XX CC susceptibility to asthma; a method for the use of a first nucleic acid
XX CC molecule for diagnosing asthma or susceptibility to asthma in a sample; a
XX CC method for assaying the presence of a first nucleic acid molecule in a
XX CC sample; a method for assessing the response to treatment with an MLK
XX CC family kinase nucleic acid inhibitor in a target population or in an
XX CC individual with an at-risk haplotype for asthma, at-risk haplotype in the
XX CC MAP3K9 gene, polymorphism in the MAP3K9 nucleic acid, dysregulation of
XX CC MAP3K9 mRNA expression, dysregulation of MAP3K9 mRNA isoform, increased
XX CC MLK1 protein expression, increased MLK1 biochemical activity or increased
XX CC MLK1 protein isoform expression; a method for assessing the response to
XX CC treatment with an MLK1 inhibitor in a target population including an
XX CC individual with an at-risk haplotype for asthma as above; a kit for
XX CC assaying a sample for the presence or absence of at least one haplotype
XX CC comprising 2 or more alleles associated with asthma comprising: at least
XX CC one nucleic acid capable of detecting the presence or absence of at least
XX CC one specific allele; a reagent kit for assaying the presence of at least
XX CC one haplotype comprising 2 or more alleles comprising: at least one
XX CC labeled nucleic acid capable of detecting at least one specific allele of
XX CC the haplotype, and reagents for detection of the label; and a reagent kit
XX CC for assaying a sample for the presence of at least one haplotype
XX CC comprising 2 or more alleles comprising: at least one nucleic acid
XX CC complementary to a part of nucleotide sequence of MAP3K9, capable of
XX CC acting as a primer for a primer extension reaction and capable of
XX CC detecting 2 or more specific alleles of the haplotype. The MLK family
XX CC kinase inhibitor has the following activities: antiaethmatic, respiratory
XX CC -gen., antiinflammatory, antirheumatic, antiarthritic, antipsoriatic,
XX CC neuroprotective, and gastrointestinal-gen. The MLK family kinase
XX CC inhibitor is useful for the treatment of asthma associated with a risk
XX CC factor selected from at-risk haplotype for asthma, at-risk haplotype in
XX CC MAP3K9 gene, polymorphism in MAP3K9 nucleic acid, dysregulation of MAP3K9
XX CC mRNA expression, dysregulation of MAP3K9 mRNA isoform, increased MLK1
XX CC protein expression, increased MLK1 biochemical activity and/or increased
XX CC MLK1 protein isoform expression; and in diagnosis or identification of
XX CC susceptibility to asthma. The inhibitor is also useful for the treatment
XX CC of other respiratory diseases associated with MAP3K9 or other members of
XX CC the JNK pathway such as chronic obstructive pulmonary disease, chronic
XX CC bronchitis and other inflammatory diseases such as rheumatoid arthritis,
XX CC psoriasis, multiple sclerosis and inflammatory bowel disease. This
XX CC polynucleotide sequence represents a reverse primer which is used in
XX CC amplifying a marker of the MAP3K9 kinase, where MAP3K9 is a part of
XX CC Mitogen-Activated Protein Kinase (MAPK) signal transduction pathways, of
XX CC the invention.
XX SQ Sequence 21 BP; 5 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 17; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1146 AGAGGATCATGCTGTTTC 1162
Db 17 AGAGGATCATGCTGTTTC 1

RESULT 1377
ID AAT38295
XX AAT38295 standard; DNA; 20 BP.
XX AC AAT38295;
XX XX 29-MAY-1997 (first entry)
XX PT

```

DE Specific primer for unique P. brasiliensis genomic DNA sequence.
 XX primer; PCR; polymerase chain reaction; amplify; unique;
 KW Paracoccidioides brasiliensis; rat beta-actin gene; target; detection;
 KW monitor treatment; contamination; ss.
 KW
 OS Synthetic.
 XX
 XX WO9629432-A1.
 XX
 XX PD 26-SEP-1996.
 XX
 XX PF 21-MAR-1996; 96WO-US003743.
 XX
 XX PR 22-MAR-1995; 95US-00408527.
 XX
 XX PA (UYBO-) UNIV BOSTON.
 XX
 XX PI Sugar AM, Goldani LZ;
 XX
 XX DR WPI; 1996-443205/44.
 XX
 XX PT Detecting infection or contamination by Paracoccidioides - using specific
 PT primers for nucleic acid amplification.
 XX
 XX PS Claim 16; Page 27; 39pp; English.
 XX
 XX AAT38294-303 are primers specific for an unique Paracoccidioides
 CC brasiliensis sequence. The unique sequence is contained in a 110 bp
 CC fragment (AAT38293) which includes 48 nucleotides of rat beta-actin
 CC primer sequence and 62 bp of unique P. brasiliensis sequence. The unique
 CC sequence can be used as a target for detection of Paracoccidioides
 CC infection. The specific primers are used to detect P. brasiliensis
 CC infection in mammals (and to monitor treatment) or contamination of food,
 CC water, soil, manufactured products (e.g. pharmaceuticals) or biomass. The
 CC method allows early (including pre-natal) diagnosis, and since samples
 CC can be sterilised is safe to perform
 XX
 XX SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.1e+03;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2571 GAGCTAGGAGAGCTCTACCC 2590
 Db 1 GTGCTAGGAGAGCTCTCCC 20
 RESULT 1378
 AAZ04740/C
 ID AAZ04740 standard; DNA; 20 BP.
 XX
 XX AC AAZ04740;
 XX
 XX DT 07-OCT-1999 (first entry)
 XX
 XX DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
 XX
 XX KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
 KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
 KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
 KW bartholinitis; pneumonia; venereal lymphogranulomatosis; ss.
 XX
 XX OS Synthetic.
 OS Chlamydia trachomatis.
 XX
 XX PN WO928475-A2.
 XX
 XX PD 10-JUN-1999.
 XX
 XX PF 27-NOV-1998; 98WO-IB001939.
 XX

PR 28-NOV-1997; 97FR-00015041.
 PR 17-DEC-1997; 97FR-00016034.
 PR 04-NOV-1998; 98US-0107077P.
 XX (GEST) GENSET.
 XX
 XX PI Griffais R;
 XX
 XX DR WPI; 1999-371125/31.
 XX
 XX PT Genome sequence of Chlamydia trachomatis.
 XX
 XX PS Disclosure; Page 1713; 1755pp; English.
 XX
 XX CC PCR primers AAZ01426-206209 were used to amplify open reading frames
 CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
 CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
 CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
 CC be used to control growth of the microorganism. Chlamydia trachomatis is
 CC responsible for a large number of diseases, e.g. eye diseases such as
 CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
 CC conjunctivitis; genital diseases such as nongonococcal urethritis;
 CC epididymitis; cervicitis; salpingitis; perihhepatitis; bartholinitis;
 CC pneumonia in breast feeding infants; and venereal lymphogranulomatosis.
 CC The polypeptides of the invention may be of use in treating these
 CC diseases
 XX
 XX SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.1e+03;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2046 CTATCGTTGAGAGCTTCGC 2065
 Db 20 CTGTTGTTGAGAGCTTCGC 1
 RESULT 1379
 AAS05713/C
 ID AAS05713 standard; DNA; 20 BP.
 XX
 XX AC AAS05713;
 XX
 XX DT 07-SEP-2001 (first entry)
 XX
 XX DE Polypyrimidine Crick strand oligonucleotide.
 XX
 XX KW reverse phase triplex forming oligonucleotide; RP-TFO;
 KW protected nucleic acid sequence; PNAS; single nucleotide polymorphism;
 KW SNP; short tandem repeat; cancer; Factor V Leiden SNP; ss.
 XX
 XX OS Synthetic.
 XX
 XX PN WO200132929-A1.
 XX
 XX PD 10-MAY-2001.
 XX
 XX PF 03-NOV-2000; 2000WO-US030534.
 XX
 XX PR 03-NOV-1999; 99US-0163356P.
 PR 03-NOV-1999; 99US-0163416P.
 PR 21-DEC-1999; 99US-0171348P.
 PR 07-JUL-2000; 2000US-0216579P.
 XX
 XX PA (CYGB-) CYGENE INC.
 PA (OSTE/) OSTE C C.
 XX
 XX PI Oste CC, Ramberg ER;
 XX
 XX DR WPI; 2001-343488/36.
 XX
 XX PT Analyzing target nucleic acid sequences, useful for population genetics,

PT drug development and diagnosing cancer, comprises hybridizing triple
 XX forming oligonucleotide and probe to target sequence.

PS Example 2; Page 66; 141pp; English.

XX The sequence is a polypyrimidine oligonucleotide for binding a second
 CC reverse phase triplex forming oligonucleotide, RP-TFO, (3' to the SNP) to
 CC the target SNP used to analyse Factor V Leiden SNP using the method of
 CC the invention. The invention relates to analysing target nucleic acid
 CC sequences comprising restricting isolated DNA, hybridising at least one
 CC triplex forming oligonucleotide (TFO), adding a 3' to 5' exonuclease to
 CC form a protected nucleic acid sequence (PNAS) tail structure, hybridising
 CC the captured structure with a single nucleotide polymorphisms (SNP)
 CC identification probe and determining the SNP score. The methods can be
 CC used for analysing target nucleic acid sequences, especially genomic DNA
 CC sequences, to determine if they contain SNPs or short tandem repeats
 CC (STRs). The methods can be used to detect SNPs for use in population
 CC genetics, drug development, forensics, cancer, genetic disease research,
 CC genomic analysis, diagnostics and therapeutics in humans, plants and
 CC animals

XX SQ Sequence 20 BP; 1 A; 1 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.8; DB 1; Length 20;

Best Local Similarity 90.0%; Pred. No. 1.1e+03;

Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAAAAAAAAAA 2728

Db 20 AATAAGAAAAAAAAAAAAAAAA 1

RESULT 1380

AAF83959/c

ID AAF83959 standard; DNA; 20 BP.

AC AAF83959;

XX 06-AUG-2001 (first entry)

DE BAP28 gene fragment amplifying primer BAP28polyTcourt.

XX BAP28; prostate; tumour; cancer; diagnostic; genetic analysis; PCTA-1;

KW PCR primer; ss.

XX Homo sapiens.

XX WO200100669-A2.

XX 04-JAN-2001.

XX 23-JUN-2000; 2000WO-IB001183.

XX 25-JUN-1999; 99US-0141323P.

XX 18-JAN-2000; 2000US-0176880P.

XX (GEST) GENSET.

XX Barry C, Bougueleret L, Chumakov I, Cohen-Akenine A;

XX WPI; 2001-367032/38.

XX New BAP28 polynucleotides and polypeptides overexpressed in prostate
 PT cancer cells for diagnosing prostate tumors, e.g. by hybridization or
 PT polymerase chain reaction assays.
 XX Example; Page 347; 349pp; English.

XX The invention is directed to BAP28 polypeptides, BAP28 polynucleotide
 CC sequences and regulatory region located at the 3' and 5' ends of the
 CC BAP28 coding region. The BAP28 polypeptides can be expressed by standard
 CC recombinant methodology. BAP28 polynucleotides and polypeptides have been
 CC found to be over expressed in prostate tumour cells, therefore levels of

CC BAP28 expression and/or activity may be assayed (e.g. by polymerase chain
 CC reaction (PCR)) to diagnose patient suffering from or susceptible to
 CC prostate cancer. Antibodies specific for the BAP28 polypeptides are
 CC useful as diagnostic reagents. Biallelic markers of the BAP28 gene are
 CC useful in genetic analysis. Sequences AAF83934-963 represent primers for
 CC the BAP28 gene and PCTA-1 gene (the coding strand of PCTA-1 gene is on
 CC the opposite of the coding strand of BAP28)

XX SQ Sequence 20 BP; 2 A; 0 C; 1 G; 17 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.8; DB 1; Length 20;

Best Local Similarity 90.0%; Pred. No. 1.1e+03;

Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2703 TGTACTAAAAAAAAAAAAA 2722

Db 20 TATACAAAAAAAAAAAAA 1

RESULT 1381

ABT07486

ID ABT07486 standard; DNA; 20 BP.

XX AC ABT07486;

XX 14-NOV-2002 (first entry)

XX Rat protein phosphatase 2 oligo inhibitor SEQ ID No 100.

XX Cytostatic; antidiabetic; antisense therapy; aberrant insulin regulation;
 KW protein phosphatase 2 catalytic beta subunit; antisense compound; cancer;
 KW hyperproliferative disorder; diabetes; inflammation; tumour; rat; ds.
 XX Rattus norvegicus.

XX WO200264737-A2.

XX 22-AUG-2002.

XX 31-JAN-2002; 2002WO-US002805.

XX 09-FEB-2001; 2001US-00780045.

XX (ISIS-) ISIS PHARM INC.

XX Monia BP, Wyatt JR;

XX WPI; 2002-657588/70.

XX New antisense oligonucleotides targeted to nucleic acid encoding Protein
 PT Phosphatase 2 catalytic subunit beta, useful for treating diseases
 PT related to Protein Phosphatase 2 catalytic subunit beta expression, such
 PT as cancer.

XX Example 16; Page 98; 137pp; English.

XX The invention relates to a novel compound 8-50 nucleotides in length
 CC targeted to a nucleic acid molecule encoding a protein phosphatase 2
 CC catalytic beta subunit, where the compound specifically hybridises with
 CC and inhibits the expression of protein phosphatase 2 catalytic beta
 CC subunits, or specifically hybridises with at least an 8-nucleotide
 CC portion of an active site on a nucleic acid molecule encoding a protein
 CC phosphatase 2 catalytic beta subunit. The antisense compounds are useful
 CC for modulating the expression of protein phosphatase 2 catalytic beta
 CC subunits and for treating diseases or conditions associated with
 CC expression of protein phosphatase 2 catalytic beta subunits, e.g.
 CC aberrant insulin regulation or diabetes or a hyperproliferative disorder,
 CC particularly cancer. The antisense compounds are also useful for
 CC diagnostics, therapeutics, prophylaxis, e.g. to prevent or delay
 CC infection, inflammation or tumour formation, as research reagents and
 CC kits, and in distinguishing between functions of various members of a
 CC biological pathway. This polynucleotide sequence represents an
 CC oligonucleotide inhibitor of rat protein phosphatase 2 catalytic beta

CC	subunit mRNA levels of the invention. NOTE: This oligonucleotide contains
CC	phosphorothioate residues and has 2'- MOE wings with a deoxy gap
XX	
SQ	Sequence 20 BP; 2 A; 10 C; 8 G; 0 T; 0 U; 0 Other;
	Query Match 0.6%; Score 16.8; DB 1; Length 20;
	Best Local Similarity 90.0%; Pred. No. 1.1e+03;
	Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0
QY	405 CGCGGGCGCGCGCGGCC 424
Dd	
	1 CAGCGGCGACGCCCGCGCC 20
RESULT 1382	
ID	ABZ85669/c
XX	ABZ85669 standard; DNA; 20 BP.
XX	ABZ85669;
XX	
DT	17-OCT-2003 (first entry)
XX	
DE	Human oligonucleotide sequence.
XX	
KW	Human; antisense; lung dysfunction; nasal airway dysfunction;
KW	antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW	antisthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW	antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW	adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW	lung inflammation; respiratory disease; ds.
OS	
XX	Homo sapiens.
XX	
PN	WO200283308-A2.
XX	
PD	31-OCT-2002.
XX	
PF	23-APR-2002; 2002WO-USO13135.
XX	
PR	24-APR-2001; 2001US-0286137P.
XX	
PA	(SPIG-) EPIGENESIS PHARM INC.
XX	
PI	Nyce JW, Li Y, Sandraasgra A, Katz E, Pabalan J, Aguilar D;
PI	Müller S, Tang L, Shahabuddin S;
XX	
DR	WPI; 2003-229219/22.
XX	
PT	Pharmaceutical composition for treating ailments associated with impaired
PT	respiration, has oligo(s) antisense to specific gene(s) or its
PT	corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT	ubiquinone.
XX	
PS	Claim 15; SEQ ID NO 911; 872pp; English.
XX	
CC	The invention relates to a novel pharmaceutical composition, which has a
CC	first active agent comprising an oligonucleotide antisense to the
CC	initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC	5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC	junctions of genes encoding a polypeptide associated with lung and/or
CC	nasal airway dysfunction and a second active agent comprising an
CC	antiinflammatory steroid and ubiquinone. A composition of the invention
CC	has antiinflammatory, antiallergic, antisthmatic, hypotensive,
CC	immunosuppressive, and cytostatic activity. The composition may have a
CC	use in antisense gene therapy. The composition is useful for treating or
CC	preventing a respiratory, lung or malignant disease or condition, also
CC	for enhancing the prophylactic or therapeutic respiratory effect of an
CC	antiinflammatory steroid in a subject, for reducing or depleting levels
CC	of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC	receptor, producing bronchodilation, increasing levels of ubiquinone or
CC	lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC	lung inflammation, lung allergies, or a respiratory disease or condition.
CC	Note: The sequence data for this patent is not represented in the printed
CC	document.

CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 13 A; 0 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 0.6%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2702 TTGTACTAAAAA 2721
|||||
Db 1 TTGTTTTAAAAA 20

RESULT 1384
ABZ85535
ID ABZ85535 standard; DNA; 20 BP.
XX
AC ABZ85535;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cyostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
FN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 777; 872pp; English.
XX

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end and genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cyostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;
Query Match 0.6%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2709 AAAAAA 2728
|||||
Db 1 AAAAAAGAGAAAAA 20

RESULT 1385
ABD25408
ID ABD25408 standard; DNA; 20 BP.
XX
AC ABD25408;
XX
DT 29-JUL-2004 (first entry)
XX
DE A112807-derived oligonucleotide SEQ ID 4420.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cyostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
FN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 4420; 763pp; English.
XX

This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cyostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 CC Sequence 20 BP; 13 A; 0 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.1e+03;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2702 TTGTACTTAAAAA 2721
 ||||| ||||| ||||| |||||
 Db 1 TTGTTTAAAAA 20

RESULT 1386
 ABD21765
 ID ABD21765 standard; DNA; 20 BP.
 AC ABD21765;
 XX
 XX 29-JUL-2004 (first entry)
 XX
 XX Human stanniocalcin-derived oligo SEQ ID 777.
 XX
 XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 XX pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.
 XX WO200285309-A2.
 XX
 XX 31-OCT-2002.
 XX
 XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.
 XX
 XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 XX Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.
 XX
 XX Pharmaceutical composition for treating asthma, has antisense
 XX oligonucleotide containing less percentage of adenosine, targeted to
 XX nucleic acids associated with lung airway or lung dysfunction, and
 XX bronchodilating agent.
 XX
 XX Claim 15; SEQ ID NO 777; 763pp; English.

XX This invention describes a novel composition (a) a first active agent,
 CC comprising oligonucleotides, effective for alleviating
 CC bronchoconstriction, respiratory tract inflammation, allergies and
 CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The
 CC oligonucleotides are derived from a gene encoding or regulating
 CC expression of a target polypeptide associated with lung airway or lung
 CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
 CC The invention also describes a kit, that comprises: (a) a delivery
 CC device, in separate containers, (b) the oligonucleotides, (c)
 CC instructions for adding a carrier and for use of the kit. The composition
 CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
 CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
 CC beta-adrenergic agonist. The composition is useful for preventing or
 CC treating a respiratory, lung or malignant disease. The administered
 CC composition comprises oligo and is administered to reduce the production
 CC or availability, or to increase the degradation of the target mRNA or to
 CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it
 CC
 CC Sequence 20 BP; 18 A; 0 C; 2 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.8; DB 1; Length 20;
 Best Local Similarity 90.0%; Pred. No. 1.1e+03;
 Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAA 2728
 ||||| ||||| ||||| |||||
 Db 1 AAAAAAAGAAAGAAAAA 20

RESULT 1387
 ABD21899/c
 ID ABD21899 standard; DNA; 20 BP.

XX ABD21899;
 XX
 XX 29-JUL-2004 (first entry)
 XX
 XX Human stanniocalcin-derived oligo SEQ ID 911.

XX Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
 XX respiratory tract inflammation; adenosine sensitivity; lung; cancer;
 XX surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
 XX analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
 XX beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
 XX respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
 XX emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
 XX pulmonary transplantation rejection; ss; primer.

XX Homo sapiens.
 XX WO200285309-A2.
 XX
 XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013143.
 XX
 XX 24-APR-2001; 2001US-0286036P.
 XX
 XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 XX Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-093058/08.


```
Query Match          0.6%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. NO. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2705 TACTAAAAA 2724
DB 20 TGCCTAAAAA 1

RESULT 1391
AD081058/c
ID AD081058 standard; DNA; 20 BP.
XX
AC AD081058;
XX
DT 29-JUL-2004 (first entry)
XX
DE Cow prion protein microsatellite locus primer #70.
XX
KW gene typing; polymorphic microsatellite loci; PML;
KW disease predisposition; microsatellite marker; prion disease;
KW cystic fibrosis; malignant hyperthermia syndrome; metabolic disease;
KW milk protein; hormone; transcripion factor; pT7-blue-vector; cow;
KW microsatellite; PCR; primer; ss.
XX
OS Bos taurus.
XX
PN DE10236711-A1.
XX
PD 26-FEB-2004.
XX
PF 09-AUG-2002; 2002DE-01036711.
XX
PR 09-AUG-2002; 2002DE-01036711.
XX
PA (UYHO-) UNIV HOHENHEIM.
XX
PI Geldermann H, Preuss S, Han Y;
XX
DR WPI; 2004-215730/21.
XX
PT Typing genes that contain polymorphic microsatellite loci, useful for
PT identifying predisposition to disease, by amplification and determining
PT length of amplicons.
XX
PS Example 3; Page 28; 64pp; German.
XX
CC The invention describes a method of typing (M1) a gene (I) that has one
CC or more polymorphic microsatellite loci (PML). The method comprises: PCR
CC amplification of at least one DNA region of (I) that includes PML, using
CC as template a DNA sample containing at least one segment of (I); and
CC determining the length of the resulting amplicon(s). Also described are:
CC a method of determining (M2) microsatellite markers (MM) for
CC predisposition to a disease, associated with a gene that includes one or
CC more PML; and prediagnosis (M3) of diseases associated with gene that
CC include PML. The method is used to identify microsatellite markers, in a
CC disease-related gene, that are associated with a predisposition to
CC diseases and for prediagnosis of such diseases, especially prion diseases
CC but also cystic fibrosis, malignant hyperthermia syndrome in pigs and
CC metabolic diseases; also to type genes that encode milk proteins,
CC hormones or transcription factors. The method is simpler, quicker and
CC particularly less expensive than known methods based on sequencing. This
CC sequence represents a primer used to genotype a region of the cow prion
CC protein (Prp) comprising a polymorphic microsatellite locus.
XX
SQ Sequence 20 BP; 0 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

Query Match          0.6%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. NO. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAA 2728
```

```
Db 20 AAAAGGAAAAA 1
|||||
RESULT 1392
ACL53467
ID ACL53467 standard; DNA; 21 BP.
XX
AC ACL53467;
XX
DT 24-MAR-2005 (first entry)
XX
DE TRPM4 target oligonucleotide, SEQ ID 14539.
XX
KW Cytostatic; Gene therapy; Vaccine; RNA Interference; cancer; ss.
XX
OS Homo sapiens.
XX
PN W02005001092-A2.
XX
PD 06-JAN-2005.
XX
PF 19-MAY-2004; 2004WO-US015645.
XX
PR 20-MAY-2003; 2003US-0471729P.
XX
PA (AMHP ) WYETH.
XX
PI Be X, Wei L, Slonim DK, Howes SH;
XX
DR WPI; 2005-075568/08.
XX
PT Pharmaceutical composition comprising an agent capable of modulating an
PT expression level or protein activity of a gene, e.g. ABCC4, or a T cell
PT activated by the polypeptide or antibody, and a carrier, useful for
PT treating cancer.
XX
PS Claim 3; SEQ ID NO 14539; 113pp; English.
XX
CC The present invention relates to a novel pharmaceutical composition
CC comprising: (a) an agent capable of modulating an expression level or
CC protein activity of a cancer-related transmembrane protein (CRTP) or gene
CC ; an antibody specific for a CRTP, or a T cell activated by a CRTP; and
CC (b) a carrier. The pharmaceutical composition may also comprise a
CC polynucleotide capable of inhibiting or decreasing the expression of the
CC CRTP by RNA interference or an antisense mechanism. The CRTPs of the
CC invention are selected from ABCC4, C20orf103, CACNA1D, CDH6, CST, ENPP3,
CC FLJ11856, GPR54, HAVCR1, SLC6A3, SLC30A4, TRG, and TRPM4. The
CC pharmaceutical composition is useful for treating cancer, e.g. colon
CC cancer, lung cancer, breast cancer, prostate cancer, liver cancer, kidney
CC cancer, stomach cancer, and esophageal cancer. The present sequence is a
CC target oligonucleotide from one such CRTP for which short interfering
CC RNAs (siRNA) were produced. Note: The sequence data for this patent did
CC not form part of the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 21 BP; 1 A; 7 C; 6 G; 7 T; 0 U; 0 Other;

Query Match          0.6%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.0%; Pred. NO. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2121 ACCTGGAGGCTTGGCCTTG 2140
|||||
DB 2 ACCTGGTGGCTTGTCTCTTG 21

RESULT 1393
AD211210/c
ID AD211210 standard; DNA; 21 BP.
XX
AC AD211210;
```

```
XX 16-JUN-2005 (first entry)
DT Human STAT3-specific antisense oligonucleotide - SEQ ID 401.
DE
XX antisense oligonucleotide; antisense therapy; inflammation;
XX antiinflammatory; rheumatoid arthritis; antiarthritic; antirheumatic;
KW cancer; cytostatic; breast tumor; prostate tumor; head & neck tumor;
KW brain tumor; multiple myeloma; melanoma; leukemia; lymphoma; STAT3; ss;
KW phosphorothioate; 2'-O-methoxyethyl; 2'-MOE wing.
XX
OS Homo sapiens.
XX
XX US2005074879-A1.
PN
XX
XX 07-APR-2005.
PD
XX
XX 06-FEB-2004; 2004US-00773678.
PF
XX
XX 06-APR-2000; 2000WO-US009054.
PR
XX 11-JAN-2001; 2001US-00758881.
PR
XX 14-NOV-2003; 2003US-00711319.
PR
XX (KARR/) KARRAS J G.
PA
XX
XX Karras JG;
PI
XX
XX WPI; 2005-272408/28.
DR
XX
XX New antisense compound, useful for treating or preventing inflammatory
XX diseases (e.g. rheumatoid arthritis) and cancers (breast, prostate, head
XX and neck, and brain cancer, myelomas, melanomas, leukemias, and
XX lymphomas).
XX
XX Example 22; SEQ ID NO 401; 149pp; English.
PS
XX
XX The invention comprises antisense oligonucleotides that are targeted to
XX nucleic acid molecules encoding human signal transducers and activators
XX of transcription 3 (STAT3). The antisense oligonucleotides of the
XX invention inhibit expression of human STAT3. The antisense
XX oligonucleotides of the invention are useful for treating and preventing
XX inflammatory diseases (e.g. rheumatoid arthritis) and cancers (e.g.
XX breast, prostate, head and neck, brain, myelomas, melanomas, leukemias,
XX and lymphomas). The present DNA sequence represents a human STAT3-
XX specific antisense oligonucleotide. NOTE: The present sequence has a
XX phosphorothioate backbone, 2'-MOE wings and a deoxy gap.
XX
XX Sequence 21 BP; 2 A; 8 C; 3 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 16.8; DB 1; Length 21;
Best Local Similarity 90.8%; Pred. No. 1.1e+03;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 2438 AAGAAGCAGCAGCTGCTGGA 2457
Db
|||||
21 AAGAAGCAGCAGATGCTGGA 2

RESULT 1394
AAQ30446/c
ID AAQ30446 standard; DNA; 18 BP.
XX
XX AAQ30446;
AC
XX
XX 25-MAR-2003 (revised)
DT
XX 07-DEC-1992 (first entry)
DT
XX
XX Oligomer TNFR941 for forming triplex with HUMNFR target duplex.
DE
XX
XX Human tumour necrosis factor receptor mRNA; AIDS; modified; HIV; RSV;
KW HPV; malignancy; hepatitis; inflammation; ss.
KW
XX
XX Synthetic.
OS
```

```
XX Key Location/Qualifiers
FH modified_base 5
FT /*tag= a
FT /mod_base= m5c
FT modified_base 18
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
XX
PN WO9209705-A1.
XX
XX 11-JUN-1992.
PD
XX
XX 25-NOV-1991; 91WO-US008811.
PF
XX
XX 23-NOV-1990; 90US-00617907.
PR
XX 18-JAN-1991; 91US-00643382.
PR
XX 08-APR-1991; 91US-00683420.
PR
XX 17-APR-1991; 91US-00686544.
PR
XX 17-APR-1991; 91US-00686546.
PR
XX 17-APR-1991; 91US-00686547.
PR
XX 27-SEP-1991; 91US-00766733.
XX
XX (GILE-) GILEAD SCI INC.
PA
XX
XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
PI
XX
XX WPI; 1992-217083/26.
DR
XX
XX New oligomers contg. modified bases - which form a triplex with G-C
XX doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX herpes malignancy and inflammation.
XX
XX Claim 12; Page 72; 77pp; English.
PS
XX
XX The synthetic oligomer is capable of forming a triplex at physiological
XX pH with a purine rich target sequence by coupling into the major groove
XX of the duplex. The specific target sequence of this oligomer is the human
XX tumour necrosis factor receptor mRNA beginning at nucleotide 2354 contg.
XX a purine rich sequence concd. on one strand of the duplex. The oligomer,
XX and others like it are useful in diagnosis and therapy of diseases
XX characterised by specific DNA duplex targets, e.g. HPV, HER, HIV,
XX hepatitis B, herpes, malignant tumours and inflammation. The triple
XX helices form under mild conditions thus assays may be carried out without
XX subjecting the test specimen to harsh conditions. See also AAQ25452-25501
XX and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.) (Updated
XX on 25-MAR-2003 to correct PD field.)
XX
XX Sequence 18 BP; 1 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 16.4; DB 1; Length 18;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2708 TAAAAA 2725
Db
|||||
18 TAAAAAAGAAAA 1

RESULT 1395
AAF75598/c
ID AAF75598 standard; DNA; 18 BP.
XX
XX AAF75598;
AC
XX
XX 10-MAY-2001 (first entry)
DT
XX
XX Binary encoded sequence tag method anchored primer #3.
DE
XX
XX Binary encoded sequence tag; BEST; nucleic acid analysis;
KW gene expression; adaptor; PCR primer; ss.
KW
XX
```

```

OS Synthetic.
PN WO200112855-A2.
XX
XX
XX 22-FEB-2001.
XX
XX 11-AUG-2000; 2000WO-US022164.
XX
XX 13-AUG-1999; 99US-0148870P.
PR 06-APR-2000; 2000US-00544713.
XX
XX (UYVA ) UNIV YALE.
XX
XX Kaufman JC, Roth ME, Lizardi PM, Feng L, Latimer DR;
XX WPI; 2001-202878/20.
XX
XX Producing binary sequence tags, useful for analyzing nucleic acid
XX sequence tags, gene expression or gene-expression patterns, involves
XX generating nucleic acid fragments, which are mixed with offset adaptors
XX and adaptor-indexers.
XX
XX Disclosure; Page 101; 101pp; English.
XX
XX The present invention describes a method of producing binary sequence
XX tags from nucleic acid fragments in a sample, involving incubating the
XX sample with cleaving reagents, mixing offset adaptors with the sample,
XX incubating with more cleaving reagents and mixing the sample with adaptor
XX -indexers where the adaptors are coupled to binary sequence tags. The
XX method is useful in sequence analysis, including analysis and comparison
XX of gene expression, nucleic acid samples and genomes
XX
XX Sequence 18 BP; 1 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 16.4; DB 1; Length 18;
XX Best Local Similarity 94.4%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX Qy 2708 TAAAAAATAAAAAAAAAA 2725
XX Db 18 TAAAAAATAAAAAAAAAA 1
XX
XX RESULT 1396
XX AAF75597/c
XX ID AAF75597 standard; DNA; 18 BP.
XX
XX AC AAF75597;
XX
XX 10-MAY-2001 (first entry)
XX
XX Binary encoded sequence tag method anchored primer #2.
XX
XX Binary encoded sequence tag; BEST; nucleic acid analysis;
XX gene expression; adaptor; PCR primer; ss.
XX
XX Synthetic.
XX
XX WO200112855-A2.
XX
XX 22-FEB-2001.
XX
XX 11-AUG-2000; 2000WO-US022164.
XX
XX 13-AUG-1999; 99US-0148870P.
PR 06-APR-2000; 2000US-00544713.
XX
XX (UYVA ) UNIV YALE.
XX
XX Kaufman JC, Roth ME, Lizardi PM, Feng L, Latimer DR;
XX WPI; 2001-202878/20.
XX
XX

```

```

PT Producing binary sequence tags, useful for analyzing nucleic acid
PT sequence tags, gene expression or gene-expression patterns, involves
PT generating nucleic acid fragments, which are mixed with offset adaptors
PT and adaptor-indexers.
XX
XX Disclosure; Page 100; 101pp; English.
XX
XX The present invention describes a method of producing binary sequence
XX tags from nucleic acid fragments in a sample, involving incubating the
XX sample with cleaving reagents, mixing offset adaptors with the sample,
XX incubating with more cleaving reagents and mixing the sample with adaptor
XX -indexers where the adaptors are coupled to binary sequence tags. The
XX method is useful in sequence analysis, including analysis and comparison
XX of gene expression, nucleic acid samples and genomes
XX
XX Sequence 18 BP; 0 A; 0 C; 1 G; 17 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 16.4; DB 1; Length 18;
XX Best Local Similarity 94.4%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX Qy 2706 ACTAAAAATAAAAAAAAA 2723
XX Db 18 ACTAAAAATAAAAAAAAA 1
XX
XX RESULT 1397
XX ABK13935/c
XX ID ABK13935 standard; DNA; 18 BP.
XX
XX AC ABK13935;
XX
XX 21-MAY-2002 (first entry)
XX
XX 5'-PCR primer used to produce single pattern characteristic by HaeII.
XX
XX Identification of transcribed gene; mRNA profile; gene expression;
XX cellular process; fingerprinting; susceptibility to external factor;
XX development; disease; PCR; primer; ss.
XX
XX Synthetic.
XX
XX WO200208461-A2.
XX
XX 31-JAN-2002.
XX
XX 23-JUL-2001; 2001WO-IB001539.
XX
XX 21-JUL-2000; 2000GB-00018016.
XX 21-JUL-2000; 2000US-0219925P.
XX
XX (GLOB-) GLOBAL GENOMICS AB.
XX
XX Linnarsson S, Ernfors P, Bauren G;
XX WPI; 2002-217065/27.
XX
XX Providing mRNA profile, by generating two independent patterns
XX characteristic of sample mRNA population, analyzing patterns, comparing
XX gene expression by cell types under varied conditions, and identifying
XX genes.
XX
XX Disclosure; Fig 1; 67pp; English.
XX
XX The present invention relates to a method for providing a profile of mRNA
XX molecules present in a sample. The method comprises generating two
XX independent patterns characteristic of the population of mRNA molecules
XX expressed in the sample and analysing the patterns using a combinatorial
XX algorithm, comparing gene expression by different or same cell types
XX under different conditions, and identifying genes having a role in
XX various cellular processes. The method is useful for the analysis and
XX identification of transcribed genes, and fingerprinting. The method can
XX be used to identify genes which play a role in determining various

```


KW short interfering nucleic acid; siNA; downregulation; inhibition;
 KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
 KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
 KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
 KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
 KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
 KW psoriasis; inflammatory bowel disease; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX Synthetic.
 OS
 XX
 XX WO2003072590-A1.
 XX
 PD 04-SEP-2003.
 XX
 XX
 PF 28-JAN-2003; 2003WO-US002510.
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 PA
 XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
 PI
 XX WPI; 2003-689980/65.
 DR
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of mitogen-activated
 PT protein kinase genes.
 XX
 XX Example 3; SEQ ID NO 163; 164pp; English.
 PS
 XX
 XX The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of a mitogen-activated protein kinase
 CC (MAPK) genes by RNA interference. Also described: (1) a method for
 CC modulating expression of MAPK genes in cells, tissue explants or
 CC organisms by introduction of siNA; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
 CC vectors that express siNA and cells containing these vectors. MAPK siNAs
 CC have cytostatic, anorectic, antidiabetic, antiinflammatory,
 CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
 CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
 CC siNAs can be used to modulate the expression of MAPK genes, in cells,
 CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
 CC and II; a wide range of tumours, and inflammatory diseases (asthma,
 CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
 CC disease). They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents a MAPK siNA which is used
 CC in the exemplification of the present invention.
 XX
 XX
 SQ Sequence 19 BP; 16 A; 1 C; 0 G; 0 T; 2 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 19;
 Best Local Similarity 88.9%; Pred. No. 1.1e+03;
 Matches 16; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2725
 Db 2 UCACAAAAAATAAAAAAAAAA 19
 RESULT 1401
 ADE29704/c
 ID ADE29704 standard; RNA; 19 BP.
 XX
 AC ADE29704;

XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:326.
 XX
 KW short interfering nucleic acid; siNA; downregulation; inhibition;
 KW mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference;
 KW cytosolic; anorectic; antidiabetic; antiinflammatory; antiasthmatic;
 KW immunosuppressive; antibacterial; antirheumatic; antiarthritic;
 KW antipsoriatic; gastrointestinal; obesity; diabetes; tumour;
 KW inflammatory disease; asthma; septic shock; rheumatoid arthritis;
 KW psoriasis; inflammatory bowel disease; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 XX Synthetic.
 OS
 XX
 XX WO2003072590-A1.
 XX
 PD 04-SEP-2003.
 XX
 XX 28-JAN-2003; 2003WO-US002510.
 XX
 XX 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 PA
 XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
 PI
 XX WPI; 2003-689980/65.
 DR
 XX
 XX New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of cancer, downregulates expression of mitogen-activated
 PT protein kinase genes.
 XX
 XX Example 3; SEQ ID NO 326; 164pp; English.
 PS
 XX
 XX The present invention describes a short interfering nucleic acid (siNA)
 CC that downregulates expression of a mitogen-activated protein kinase
 CC (MAPK) genes by RNA interference. Also described: (1) a method for
 CC modulating expression of MAPK genes in cells, tissue explants or
 CC organisms by introduction of siNA; (2) kits for in vitro or in vivo
 CC delivery of siNA; (3) conjugates and/or complexes of siNA; and (4)
 CC vectors that express siNA and cells containing these vectors. MAPK siNAs
 CC have cytostatic, anorectic, antidiabetic, antiinflammatory,
 CC antiasthmatic, immunosuppressive, antibacterial, antirheumatic,
 CC antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK
 CC siNAs can be used to modulate the expression of MAPK genes, in cells,
 CC tissue explants or organisms, e.g. for treating obesity; diabetes types I
 CC and II; a wide range of tumours, and inflammatory diseases (asthma,
 CC septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel
 CC disease). They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents a MAPK siNA which is used
 CC in the exemplification of the present invention.
 XX
 XX
 SQ Sequence 19 BP; 2 A; 0 C; 1 G; 0 T; 16 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 19;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAAAAAA 2725
 Db 18 TCACAAAAAATAAAAAAAAAA 1

```

RESULT 1402
ADU64845/c
ID ADU64845 standard; RNA; 19 BP.
AC ADU64845;
XX
DT 27-JAN-2005 (first entry)
XX
DE Human MAP kinase 1/ ERK2 siRNA #326.
XX
XX RNA interference; mitogen activated protein kinase inhibitor;
KW inflammation; immunosuppressive; immune disorder; autoimmune disease;
KW allergy; antiallergic; cytostatic; neoplasm; cancer; ss; siRNA;
KW gene silencing; small interfering RNA; MAP kinase inhibitor.
XX
OS Homo sapiens.
XX
PN WO2004097020-A2.
XX
PD 11-NOV-2004.
XX
PF 23-APR-2004; 2004WO-US012517.
XX
PR 25-APR-2003; 2003US-00424339.
PR 30-APR-2003; 2003US-00427160.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 14-JAN-2004; 2004US-00757803.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
PI Polisky B;
XX
XX WPI; 2005-012649/01.
XX
XX Novel short interfering nucleic acid molecule useful for inhibiting
PT mitogen activated protein kinase gene expression e.g., c-JUN associated
PT with diseases e.g., inflammatory disease or autoimmune disease.
XX
XX Disclosure; SEQ ID NO 326; 322pp; English.
XX
XX The invention relates to a chemically synthesized double stranded short
CC interfering nucleic acid (siNA) molecule (I) that directs cleavage of a c
CC -JUN RNA through RNA interference (RNAi), where one strand of the siNA
CC molecule comprises nucleotide sequence having sufficient complementarity
CC to the c-JUN RNA for the siNA molecule to direct cleavage of the c-JUN
CC RNA through RNA interference. (I) is useful for inhibiting mitogen
CC activated protein kinase gene (e.g., c-JUN, JNK1, JNK2, p38, ERK1 or
CC ERK2) expression associated with diseases e.g., inflammatory disease,
CC autoimmune disease, allergy, cancer. (I) exhibits improved RNA
CC interference activity and nuclease resistance. The present sequence
CC represents a human MAP kinase 1/ ERK2 siRNA.
XX
XX Sequence 19 BP; 2 A; 0 C; 1 G; 0 T; 16 U; 0 Other;
SQ
Query Match 0.6%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAIAAAAAAAAAAAAAA 2725
Db 18 TCAAAAAAAAAAAAAAAAAAAAA 1

RESULT 1403
ADU64682
ID ADU64682 standard; RNA; 19 BP.
XX
AC ADU64682;
XX
DT 27-JAN-2005 (first entry)
XX

```

```

XX Human MAP kinase 1/ ERK2 siRNA #163.
DE
XX RNA interference; mitogen activated protein kinase inhibitor;
KW inflammation; immunosuppressive; immune disorder; autoimmune disease;
KW allergy; antiallergic; cytostatic; neoplasm; cancer; ss; siRNA;
KW gene silencing; small interfering RNA; MAP kinase inhibitor.
XX
OS Homo sapiens.
XX
PN WO2004097020-A2.
XX
PD 11-NOV-2004.
XX
PF 23-APR-2004; 2004WO-US012517.
XX
PR 25-APR-2003; 2003US-00424339.
PR 30-APR-2003; 2003US-00427160.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 14-JAN-2004; 2004US-00757803.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Mcswiggen J, Beigelman L, Usman N, Haerberli P, Chowrira B;
PI Polisky B;
XX
XX WPI; 2005-012649/01.
XX
XX Novel short interfering nucleic acid molecule useful for inhibiting
PT mitogen activated protein kinase gene expression e.g., c-JUN associated
PT with diseases e.g., inflammatory disease or autoimmune disease.
XX
XX Disclosure; SEQ ID NO 163; 322pp; English.
XX
XX The invention relates to a chemically synthesized double stranded short
CC interfering nucleic acid (siNA) molecule (I) that directs cleavage of a c
CC -JUN RNA through RNA interference (RNAi), where one strand of the siNA
CC molecule comprises nucleotide sequence having sufficient complementarity
CC to the c-JUN RNA for the siNA molecule to direct cleavage of the c-JUN
CC RNA through RNA interference. (I) is useful for inhibiting mitogen
CC activated protein kinase gene (e.g., c-JUN, JNK1, JNK2, p38, ERK1 or
CC ERK2) expression associated with diseases e.g., inflammatory disease,
CC autoimmune disease, allergy, cancer. (I) exhibits improved RNA
CC interference activity and nuclease resistance. The present sequence
CC represents a human MAP kinase 1/ ERK2 siRNA.
XX
XX Sequence 19 BP; 16 A; 1 C; 0 G; 0 T; 2 U; 0 Other;
SQ
Query Match 0.6%; Score 16.4; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.1e+03;
Matches 16; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAIAAAAAAAAAAAAAA 2725
Db 2 UCAAAAAAAAAAAAAAAAAAAAA 19

RESULT 1404
ADZ00541/c
ID ADZ00541 standard; DNA; 19 BP.
XX
AC ADZ00541;
XX
XX 16-JUN-2005 (first entry)
XX
XX Human AdipoR1 reverse primer, primer2.
XX
XX ss; PCR; Cardiant; Dermatological; Gastrointestinal; Hemostatic;
KW Respiratory-Gen; Nootropic; Neuroprotective; Uropathic; Cytostatic;
KW Antinflammatory; AdipoR1-inhibitor; AdipoR1-activator;
KW G protein coupled receptor; AdipoR1; primer.

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XX OS Homo sapiens.
XX OS Synthetic.
XX PN WO2005031346-A2.
XX XX 07-APR-2005.
XX PF 16-SEP-2004; 2004WO-EP010384.
XX XX 27-SEP-2003; 2003EP-00021897.
XX PA (FARB ) BAYER HEALTHCARE AG.
XX XX
XX PI Golz S, Brueggemeier U, Geerts A;
XX DR WPI; 2005-254243/26.
XX XX
XX PT Screening for therapeutic agents useful for treating cardiovascular,
XX PT dermatological, respiratory or neurological diseases, cancer or
XX PT inflammation in a mammal comprises contacting a test compound with a
XX PT Adipor1 polypeptide.
XX PS Example 2; SEQ ID NO 4; 135pp; English.
XX XX
XX CC This sequence represents a primer which was used for relative
XX CC quantitation of the distribution of the G protein coupled receptor,
XX CC Adipor1, mRNA in cells and tissues. The method of the invention for
XX CC screening for therapeutic agents useful for treating cardiovascular,
XX CC dermatological, gastroenterological, hematological, respiratory,
XX CC neurological or urological diseases, cancer or inflammation in a mammal
XX CC comprises contacting a test compound with an Adipor1 polypeptide and
XX CC detecting binding of the test compound to the Adipor1 polypeptide. A
XX CC further method is included for diagnosing any of the diseases cited above
XX CC in a mammal comprising determining the amount of an Adipor1
XX CC polynucleotide in a sample taken from the mammal and determining the
XX CC amount of Adipor1 polynucleotide in healthy and/or diseased mammals.
XX CC Regulators of Adipor1 activity are useful for regulating Adipor1 activity
XX CC in a mammal having such diseases.
XX SQ Sequence 19 BP; 1 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1895 GTGCCACAGGAGGAG 1912
DB 18 GTGCCACAGGAGGAG 1

RESULT 1405
AEA99304
ID AEA99304 standard; RNA; 19 BP.
XX AC AEA99304;
XX XX
XX DT 11-AUG-2005 (first entry)
XX XX
XX DE Human FasL TNFSF6 gene target and upper siRNA SEQ ID NO:404.
XX XX
XX KW spinal cord injury; short interfering RNA; siRNA; RNA interference;
XX KW gene silencing; RNA cleavage; Fas; vulnery; ds.
XX OS Homo sapiens.
XX XX
XX PN US2005119212-A1.
XX XX
XX PD 02-JUN-2005.
XX XX
XX PF 18-JUN-2004; 2004US-00871222.
XX PR 18-MAY-2001; 2001US-0292217P.

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PR 20-FEB-2002; 2002US-0358580P.
PR 06-MAR-2002; 2002US-0362016P.
PR 11-MAR-2002; 2002US-0363124P.
PR 20-MAY-2002; 2002WO-US015876.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
PR 20-FEB-2003; 2003WO-US005028.
PR 30-APR-2003; 2003US-00427160.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.
PR 10-FEB-2004; 2004US-0543480P.
PR 13-FEB-2004; 2004US-00780447.
PR 16-APR-2004; 2004US-00826966.
PR 30-APR-2004; 2004WO-US013456.
PR 24-MAY-2004; 2004WO-US016390.
XX XX
XX FA (SIRN-) SIRNA THERAPEUTICS INC.
XX PI Haerberli P, Mcswiggen J;
XX XX
XX DR WPI; 2005-494870/50.
XX XX
XX PT Treating spinal cord injury in subject, involves administering to
XX PT subject, short interfering nucleic acid directing cleavage of Fas RNA
XX PT through RNA interference under conditions suitable to modulate expression
XX PT of Fas in subject.
XX XX
XX PS Claim 33; SEQ ID NO 404; 98pp; English.
XX XX
XX CC The invention relates to a method (M1) for treating spinal cord injury in
XX CC a subject. (M1) involves administering to the subject, a short
XX CC interfering nucleic acid (siNA) molecule (I) that directs cleavage of a
XX CC Fas RNA through RNA interference (RNAi) under conditions suitable to
XX CC modulate the expression of Fas in the subject. Also described: (1) an
XX CC expression vector comprising (1); (2) a kit comprising (1); (3) a human
XX CC cell comprising (1); (4) a pharmaceutical composition comprising (1); and
XX CC (5) a method of synthesizing (1). The present sequence represents a human
XX CC Fas ligand (FasL) tumor necrosis factor receptor superfamily member 6
XX CC (TNFSF6) target and upper (sense) siRNA oligonucleotide, which is used in
XX CC the exemplification of the present invention.
XX SQ Sequence 19 BP; 17 A; 1 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.1e+03;
Matches 16; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2705 TACTAAAAA 2722
DB 2 UACAAAAA 19

RESULT 1406
AEA99408/c
ID AEA99408 standard; RNA; 19 BP.
XX AC AEA99408;
XX XX
XX DT 11-AUG-2005 (first entry)
XX XX
XX DE Human FasL TNFSF6 gene lower siRNA sequence SEQ ID NO:508.
XX XX
XX KW spinal cord injury; short interfering RNA; siRNA; RNA interference;
XX KW gene silencing; RNA cleavage; Fas; vulnery; ds.
XX OS Homo sapiens.

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OS Synthetic.
XX US2005119212-A1.
XX 02-JUN-2005.
XX
XX 18-JUN-2004; 2004US-00871222.
XX
XX 18-MAY-2001; 2001US-0292217P.
XX 20-FEB-2002; 2002US-0358580P.
XX 06-MAR-2002; 2002US-0362016P.
XX 11-MAR-2002; 2002US-0363124P.
XX 20-MAY-2002; 2002WO-US015876.
XX 06-JUN-2002; 2002US-0386782P.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX 20-FEB-2003; 2003WO-US005028.
XX 20-FEB-2003; 2003WO-US005346.
XX 30-APR-2003; 2003US-00427160.
XX 23-MAY-2003; 2003US-0044853.
XX 23-OCT-2003; 2003US-00693059.
XX 24-NOV-2003; 2003US-00720448.
XX 03-DEC-2003; 2003US-00727780.
XX 14-JAN-2004; 2004US-00757803.
XX 10-FEB-2004; 2004US-0543480P.
XX 13-FEB-2004; 2004US-00780447.
XX 16-APR-2004; 2004US-00826966.
XX 30-APR-2004; 2004WO-US013456.
XX 24-MAY-2004; 2004WO-US016390.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Haerberli P, Mcswiggen J;
XX
XX WPI; 2005-494870/50.
XX
XX
XX Treating spinal cord injury in subject, involves administering to
PT subject, short interfering nucleic acid directing cleavage of Fas RNA
PT through RNA interference under conditions suitable to modulate expression
PT of Fas in subject.
XX
XX Claim 33; SEQ ID NO 508; 98pp; English.
XX
XX The invention relates to a method (M1) for treating spinal cord injury in
CC a subject. (M1) involves administering to the subject, a short
CC interfering nucleic acid (siRNA) molecule (I) that directs cleavage of a
CC Fas RNA through RNA interference (RNAi) under conditions suitable to
CC modulate the expression of Fas in the subject. Also described: (1) an
CC expression vector comprising (I); (2) a kit comprising (I); (3) a human
CC cell comprising (I); (4) a pharmaceutical composition comprising (I); and
CC (5) a method of synthesizing (I). The present sequence represents a human
CC Fas ligand (FasL) tumor necrosis factor receptor superfamily member 6
CC (TNFRSF6) lower (antisense) siRNA oligonucleotide, which is used in the
CC exemplification of the present invention.
XX
XX Sequence 19 BP; 1 A; 0 C; 1 G; 0 T; 17 U; 0 Other;
SQ
Query Match 0.68; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2705 TACTAAAAA 2722
DB 18 TACAAAAA 1
RESULT 1407
AEC90871/c
ID AEC90871 standard; RNA; 19 BP.
XX
XX AEC90871;
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XX
DT 17-NOV-2005 (first entry)
XX
DE STAT-3 siRNA antisense strand, SEQ ID 469.
XX
XX Signal-transducer and activator of transcription-3; RNA interference;
KW gene silencing; cytostatic; antiproliferative; dermatological;
KW antiinflammatory; gastrointestinal-Gen.; cancer; inflammation; psoriasis;
KW eczema; dermatitis; Crohns disease; inflammatory bowel disease; siRNA;
KW short interfering RNA; ss.
OS Synthetic.
XX US2005196781-A1.
XX
XX 08-SEP-2005.
XX
XX 15-DEC-2004; 2004US-00014373.
XX
XX 18-MAY-2001; 2001US-0292217P.
XX 20-JUL-2001; 2001US-0306882P.
XX 13-AUG-2001; 2001US-0311865P.
XX 20-FEB-2002; 2002US-0358580P.
XX 06-MAR-2002; 2002US-0362016P.
XX 11-MAR-2002; 2002US-0363124P.
XX 17-MAY-2002; 2002US-00151116.
XX 17-MAY-2002; 2002WO-US015876.
XX 06-JUN-2002; 2002US-0386782P.
XX 22-JUL-2002; 2002US-00201394.
XX 29-AUG-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX 09-SEP-2002; 2002US-0409293P.
XX 15-JAN-2003; 2003US-0440129P.
XX 20-FEB-2003; 2003WO-US005028.
XX 20-FEB-2003; 2003WO-US005346.
XX 30-APR-2003; 2003US-00427160.
XX 23-MAY-2003; 2003US-0044853.
XX 23-OCT-2003; 2003US-00693059.
XX 24-NOV-2003; 2003US-00720448.
XX 03-DEC-2003; 2003US-00727780.
XX 14-JAN-2004; 2004US-00757803.
XX 10-FEB-2004; 2004US-0543480P.
XX 13-FEB-2004; 2004US-00780447.
XX 16-APR-2004; 2004US-00826966.
XX 30-APR-2004; 2004WO-US013456.
XX 24-MAY-2004; 2004WO-US016390.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Robin H, Mcswiggen J;
XX
XX WPI; 2005-604649/62.
XX
XX Novel chemically synthesized double stranded short interfering nucleic
PT acid molecule that directs cleavage of STAT3 RNA through RNA
PT interference, useful for treating cancer and inflammatory diseases e.g.
PT psoriasis in subject or organism.
XX
XX Example 3; SEQ ID NO 469; 266pp; English.
XX
XX The invention relates to a novel chemically synthesized double stranded
CC short interfering nucleic acid molecule that directs cleavage of a signal
CC transducer and activator of transcription 3 (STAT3) RNA by RNA
CC interference. The invention further includes a composition comprising the
CC short interfering nucleic acid in a carrier or diluent. The short
CC interfering nucleic acid has cytostatic, antiproliferative, dermatological,
CC antiinflammatory, and gastrointestinal-Gen. activities. The short
CC interfering nucleic acid or its composition is useful for treating,
CC preventing, inhibiting, or reducing cancer, proliferative, and/or
CC inflammatory diseases, disorders, or conditions in a subject or organism,
CC such as psoriasis, eczema, dermatitis, Crohn's disease, and inflammatory
CC bowel disease, and for any other disease, trait, or condition that is
CC related to or will respond to the levels of STAT3 in a cell or tissue,
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PR 24-NOV-2003; 2003US-00720448.
 PR 03-DEC-2003; 2003US-00727780.
 PR 14-JAN-2004; 2004US-00757803.
 PR 10-FEB-2004; 2004US-0543480P.
 PR 13-FEB-2004; 2004US-00780447.
 PR 16-APR-2004; 2004US-00826966.
 PR 30-APR-2004; 2004WO-US013456.
 PR 24-MAY-2004; 2004WO-US016390.
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 PA Gueriolini R, Mcswiggen J;
 XX WPI; 2006-037965/04.
 XX Novel chemically synthesized double-stranded short interfering nucleic
 PT acid molecule directing cleavage of vitamin D receptor RNA through RNA
 PT interference, useful for treating such as alopecia and atrichia.
 XX Claim 33; SEQ ID NO 451; 238pp; English.
 XX The invention relates to chemically synthesized short interfering nucleic
 CC acids (siNAs) which downregulate expression of the vitamin D receptor
 CC (VDR) gene by RNA interference. The siNAs may or may not comprise
 CC ribonucleotides, can contain deoxyribonucleotides, can be chemically
 CC modified and may be double or single stranded. They further comprise
 CC sense and antisense regions, or alternatively are assembled from a sense
 CC oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs
 CC include short interfering RNA (siRNA), double-stranded RNA, micro-RNA
 CC (miRNA) and short hairpin RNA (shRNA). The invention also relates to
 CC pharmaceutical compositions comprising an siNA targeted to a human
 CC vitamin D receptor mRNA (see RefSeq accession number NM 000376
 CC (AEE65732)), especially the siRNAs shown in AEE65103-AEE65727. The
 CC invention further discloses expression vectors and host cells comprising
 CC an siNA of the invention. The siNAs are used to modulate expression of
 CC the vitamin D receptor gene in cells, tissue explants or organisms for
 CC the treatment of a variety of conditions. siNAs that downregulate vitamin
 CC D receptor expression may be used to prevent or reduce hair growth, and
 CC can be used to target anaphase in hair follicles for hair removal
 CC (depilation). siNAs that act to upregulate vitamin D receptor expression
 CC (such as those that downregulate the expression of an inhibitor of
 CC vitamin D receptor expression) can be used in the treatment or prevention
 CC of alopecia (e.g., androgenic alopecia), atrichia or other disorder
 CC associated with a deficiency of vitamin D receptor expression. The siNAs
 CC may also be used in drug screening, diagnostics, therapeutic target
 CC identification and validation, genetic engineering, pharmacogenomics,
 CC studying gene function, and gene mapping (e.g., of single nucleotide
 CC polymorphisms). The present sequence represents the antisense strand of a
 CC human vitamin D receptor transcript variant 1-targeted double-stranded
 CC siRNA.
 XX
 XX Sequence 19 BP; 1 A; 0 C; 1 G; 0 T; 17 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 19;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2705 TACTAAAAAAAAAAAAAAA 2722
 ||| ||||| ||||| |||||
 Db 18 TACAAAAAATAAAAAAAAAA 1
 RESULT 1410
 AEE65297
 ID AEE65297 standard; RNA; 19 BP.
 AC AEE65297;
 XX
 XX 09-FEB-2006 (first entry)
 DT
 XX Human vitamin D receptor target sequence/siRNA sense strand, SEQ:195.
 DE
 XX RNA interference; gene silencing; short interfering RNA; siRNA;
 KW

KW hair disease; depilatory; alopecia; atrichia; endocrine-gen.;
 XX vitamin D receptor; ss.
 XX Homo sapiens.
 OS
 XX US2005277608-A1.
 PN
 XX 15-DEC-2005.
 PD
 XX 23-JUL-2004; 2004US-00898311.
 XX
 XX 18-MAY-2001; 2001US-0292217P.
 PR 20-JUL-2001; 2001US-0306883P.
 PR 13-AUG-2001; 2001US-0311865P.
 PR 20-FEB-2002; 2002US-0358580P.
 PR 06-MAR-2002; 2002US-0362016P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 17-MAY-2002; 2002WO-US015876.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409239P.
 PR 15-JAN-2003; 2003US-0440129P.
 PR 20-FEB-2003; 2003WO-US005028.
 PR 20-FEB-2003; 2003WO-US005346.
 PR 16-APR-2003; 2003US-00417012.
 PR 30-APR-2003; 2003US-00427160.
 PR 23-MAY-2003; 2003US-00444853.
 PR 23-OCT-2003; 2003US-00693059.
 PR 24-NOV-2003; 2003US-00720448.
 PR 03-DEC-2003; 2003US-00727780.
 PR 14-JAN-2004; 2004US-00757803.
 PR 10-FEB-2004; 2004US-0543480P.
 PR 13-FEB-2004; 2004US-00780447.
 PR 16-APR-2004; 2004US-00826966.
 PR 30-APR-2004; 2004WO-US013456.
 PR 24-MAY-2004; 2004WO-US016390.
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 PA Gueriolini R, Mcswiggen J;
 XX WPI; 2006-037965/04.
 XX Novel chemically synthesized double-stranded short interfering nucleic
 PT acid molecule directing cleavage of vitamin D receptor RNA through RNA
 PT interference, useful for treating such as alopecia and atrichia.
 XX Claim 33; SEQ ID NO 195; 238pp; English.
 PS
 XX The invention relates to chemically synthesized short interfering nucleic
 CC acids (siNAs) which downregulate expression of the vitamin D receptor
 CC (VDR) gene by RNA interference. The siNAs may or may not comprise
 CC ribonucleotides, can contain deoxyribonucleotides, can be chemically
 CC modified and may be double or single stranded. They further comprise
 CC sense and antisense regions, or alternatively are assembled from a sense
 CC oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs
 CC include short interfering RNA (siRNA), double-stranded RNA, micro-RNA
 CC (miRNA) and short hairpin RNA (shRNA). The invention also relates to
 CC pharmaceutical compositions comprising an siNA targeted to a human
 CC vitamin D receptor mRNA (see RefSeq accession number NM 000376
 CC (AEE65732)), especially the siRNAs shown in AEE65103-AEE65727. The
 CC invention further discloses expression vectors and host cells comprising
 CC an siNA of the invention. The siNAs are used to modulate expression of
 CC the vitamin D receptor gene in cells, tissue explants or organisms for
 CC the treatment of a variety of conditions. siNAs that downregulate vitamin
 CC D receptor expression may be used to prevent or reduce hair growth, and
 CC can be used to target anaphase in hair follicles for hair removal
 CC (depilation). siNAs that act to upregulate vitamin D receptor expression
 CC (such as those that downregulate the expression of an inhibitor of
 CC vitamin D receptor expression) can be used in the treatment or prevention
 CC of alopecia (e.g., androgenic alopecia), atrichia or other disorder
 CC associated with a deficiency of vitamin D receptor expression. The siNAs
 CC may also be used in drug screening, diagnostics, therapeutic target
 CC identification and validation, genetic engineering, pharmacogenomics,
 CC studying gene function, and gene mapping (e.g., of single nucleotide
 CC polymorphisms). The present sequence represents the antisense strand of a
 CC human vitamin D receptor transcript variant 1-targeted double-stranded
 CC siRNA.
 XX
 XX Sequence 19 BP; 1 A; 0 C; 1 G; 0 T; 17 U; 0 Other;
 Query Match 0.6%; Score 16.4; DB 1; Length 19;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2705 TACTAAAAAAAAAAAAAAA 2722
 ||| ||||| ||||| |||||
 Db 18 TACAAAAAATAAAAAAAAAA 1
 RESULT 1410
 AEE65297
 ID AEE65297 standard; RNA; 19 BP.
 AC AEE65297;
 XX
 XX 09-FEB-2006 (first entry)
 DT
 XX Human vitamin D receptor target sequence/siRNA sense strand, SEQ:195.
 DE
 XX RNA interference; gene silencing; short interfering RNA; siRNA;
 KW

CC may also be used in drug screening, diagnostics, diagnostics, therapeutic target
 CC identification and validation, genetic engineering, pharmacogenomics,
 CC studying gene function, and gene mapping (e.g., of single nucleotide
 CC polymorphisms). The present sequence represents the sense strand of a
 CC human vitamin D receptor transcript variant 1-targeted double-stranded
 CC siRNA, which is identical to the human vitamin D receptor transcript
 CC variant 1 target sequence.

XX Sequence 19 BP; 17 A; 1 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 19;

Best Local Similarity 88.9%; Pred. No. 1.1e+03;
 Matches 16; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 2705 TACTTAAAAA AAAAAA 2722

DB 2 UACAAAAA AAAAAA 19

RESULT 1411

AEF36928

ID AEF36928 standard; RNA; 19 BP.

AC AEF36928;

XX 23-MAR-2006 (first entry)

DE Human SDF-1 (CXCL12b) target sequence/siRNA sense strand, SEQ:395.
 XX RNA interference; gene silencing; short interfering RNA; siRNA; cancer;
 KW neoplasm; hyperproliferation; cytostatic; respiratory disease;
 KW respiratory-gen.; cardiovascular disease; cardiovascular-gen.;

KW ocular disease; ophthalmological; diabetic retinopathy; antidiabetic;
 KW stromal cell-derived factor-1; SDF-1; chemokine CXC motif ligand 12;
 CXCL12; ss.
 XX Homo sapiens.

OS Homo sapiens.

XX US2006019917-A1.

PN 26-JAN-2006.

PD 27-MAY-2005; 2005US-00140328.

XX 18-MAY-2001; 2001US-0292217P.

PR 20-JUL-2001; 2001US-0306883P.

PR 13-AUG-2001; 2001US-0311865P.

PR 20-FEB-2002; 2002US-0358580P.

PR 06-MAR-2002; 2002US-0362016P.

PR 11-MAR-2002; 2002US-0363124P.

PR 17-MAY-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-040129P.

PR 20-FEB-2003; 2003WO-US005028.

PR 20-FEB-2003; 2003WO-US005346.

PR 30-APR-2003; 2003US-00427160.

PR 23-MAY-2003; 2003US-00444853.

PR 23-OCT-2003; 2003US-00693059.

PR 24-NOV-2003; 2003US-00720448.

PR 03-DEC-2003; 2003US-00727780.

PR 14-JAN-2004; 2004US-00757803.

PR 10-FEB-2004; 2004US-0543480P.

PR 13-FEB-2004; 2004US-00780447.

PR 16-APR-2004; 2004US-00826966.

PR 30-APR-2004; 2004WO-US013456.

PR 24-MAY-2004; 2004WO-US016390.

PR 20-AUG-2004; 2004US-00923536.

PR 09-FEB-2005; 2005WO-US004270.

PR 04-APR-2005; 2005US-00098303.

XX

PA (SIRN-) SIRNA THERAPEUTICS INC.

PI Guerciollini R, Mcswiggen J;

XX WPI; 2006-134231/14.

DR Chemically synthesized double-stranded short interfering nucleic acid

XX molecule directing cleavage of stromal cell derived factor-1 RNA, useful
 PT for treating cancer and ocular, respiratory and cardiovascular diseases.

XX Example 3; SEQ ID NO 395; 384pp; English.

XX The invention relates to chemically synthesized short interfering nucleic
 CC acids (siNAs) which downregulate stromal cell-derived factor-1 (SDF-1,
 CC chemokine CXC motif ligand 12, CXCL12) gene expression by RNA
 CC interference. The siNAs are characterized in that one or more nucleotides
 CC is chemically modified to reduce the immunostimulatory properties of each
 CC siNA to a level below that of a corresponding unmodified siNA.

CC Additionally, the siNAs may or may not comprise ribonucleotides, can
 CC contain deoxyribonucleotides, and may be double or single stranded. They
 CC further comprise sense and antisense regions, or alternatively are
 CC assembled from a sense oligonucleotide and an antisense oligonucleotide.

CC Specifically, the siNAs include short interfering RNA (siRNA), double-
 CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The
 CC invention also relates to pharmaceutical compositions comprising an siNA
 CC targeted to an SDF-1 mRNA. The siNAs of the invention are used to
 CC modulate expression of the SDF-1 gene in cells, tissue explants or
 CC organisms (e.g., by ex vivo gene therapy), or in grafts and transplants

CC for the treatment of a variety of conditions. They may be used in the
 CC treatment of cancer and other proliferative conditions, respiratory
 CC diseases, cardiovascular diseases and ocular diseases, and are especially
 CC useful for the treatment of diabetic retinopathy (proliferative
 CC retinopathy). The siNAs may also be used in drug screening, diagnosis,

CC therapeutic target identification and validation, genetic engineering,
 CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
 CC single nucleotide polymorphisms). The present sequence represents the
 CC sense strand of a double-stranded siRNA targeted to human SDF-1
 CC transcript variant 1 (CXCL12b), which is identical to the human SDF-1
 CC variant 1 target sequence.

XX Sequence 19 BP; 16 A; 3 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 19;

Best Local Similarity 94.4%; Pred. No. 1.1e+03;

Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA AAAAAA 2723

DB 2 ACCAAAAA AAAAAA 19

RESULT 1412

AEF37107/C

ID AEF37107 standard; RNA; 19 BP.

XX AEF37107;

AC AEF37107;

XX 23-MAR-2006 (first entry)

DE Human SDF-1 (CXCL12b) siRNA antisense strand, SEQ:574.

XX RNA interference; gene silencing; short interfering RNA; siRNA; cancer;
 KW neoplasm; hyperproliferation; cytostatic; respiratory disease;
 KW respiratory-gen.; cardiovascular disease; cardiovascular-gen.;

KW ocular disease; ophthalmological; diabetic retinopathy; antidiabetic;

KW stromal cell-derived factor-1; SDF-1; chemokine CXC motif ligand 12;
 CXCL12; ss.

XX Homo sapiens.

OS Homo sapiens.

XX US2006019917-A1.

PN 26-JAN-2006.

PD

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XX PF 27-MAY-2005; 2005US-00140328.
XX PR 18-MAY-2001; 2001US-0292217P.
XX PR 20-JUL-2001; 2001US-0306883P.
XX PR 13-AUG-2001; 2001US-0311865P.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 06-MAR-2002; 2002US-0362016P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 17-MAY-2002; 2002WO-US015876.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PR 20-FEB-2003; 2003WO-US005028.
XX PR 20-FEB-2003; 2003WO-US005346.
XX PR 30-APR-2003; 2003US-00427160.
XX PR 23-MAY-2003; 2003US-00444853.
XX PR 23-OCT-2003; 2003US-00693059.
XX PR 24-NOV-2003; 2003US-00720448.
XX PR 03-DEC-2003; 2003US-00727780.
XX PR 14-JAN-2004; 2004US-00757803.
XX PR 10-FEB-2004; 2004US-0543480P.
XX PR 13-FEB-2004; 2004US-00780447.
XX PR 16-APR-2004; 2004US-00826966.
XX PR 30-APR-2004; 2004WO-US013456.
XX PR 24-MAY-2004; 2004WO-US016390.
XX PR 20-AUG-2004; 2004US-00923536.
XX PR 09-FEB-2005; 2005WO-US004270.
XX PR 04-APR-2005; 2005US-00098303.
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX GUerciolini R, Mcswiggen J;
XX WPI; 2006-134231/14.
XX DR
XX
XX Chemically synthesized double-stranded short interfering nucleic acid
XX molecule directing cleavage of stromal cell derived factor-1 RNA, useful
XX for treating cancer and ocular, respiratory and cardiovascular diseases.
XX
XX Example 3; SEQ ID NO 574; 384pp; English.
XX
XX The invention relates to chemically synthesized short interfering nucleic
XX acids (siNAs) which downregulate stromal cell-derived factor-1 (SDF-1,
XX chemokine CXCL12, CXCL12) gene expression by RNA
XX interference. The siNAs are characterized in that one or more nucleotides
XX of each siNA are chemically modified to reduce the immunostimulatory properties of each
XX siNA to a level below that of a corresponding unmodified siNA.
XX Additionally, the siNAs may or may not comprise ribonucleotides, can
XX contain deoxyribonucleotides, and may be double or single stranded. They
XX further comprise sense and antisense regions, or alternatively are
XX assembled from a sense oligonucleotide and an antisense oligonucleotide.
XX Specifically, the siNAs include short interfering RNA (siRNA), double-
XX stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The
XX invention also relates to pharmaceutical compositions comprising an siNA
XX targeted to an SDF-1 mRNA. The siNAs of the invention are used to
XX modulate expression of the SDF-1 gene in cells, tissue explants or
XX organisms (e.g., by ex vivo gene therapy), or in grafts and transplants
XX for the treatment of a variety of conditions. They may be used in the
XX treatment of cancer and other proliferative conditions, respiratory
XX diseases, cardiovascular diseases and ocular diseases, and are especially
XX useful for the treatment of diabetic retinopathy (proliferative
XX retinopathy). The siNAs may also be used in drug screening, diagnosis,
XX therapeutic target identification and validation, genetic engineering,
XX pharmacogenomics, studying gene function, and gene mapping (e.g., of
XX single nucleotide polymorphisms). The present sequence represents the
XX antisense strand of a double-stranded siRNA targeted to human SDF-1
XX transcript variant 1 (CXCL12b).
XX
XX Sequence 19 BP; 0 A; 0 C; 3 G; 0 T; 16 U; 0 Other;
XX SQ
```

```
Query Match 0.6%; Score 16.4; DB 1; Length 19;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2723
Db 18 ACCAAAAA 1

RESULT 1413
AAV12302
ID AAV12302 standard; DNA; 20 BP.
XX
XX AC AAV12302;
XX DT 17-JUN-1998 (first entry)
XX DE Ribonucleotide reductase R1 3'UTR fragment SEQ ID NO:46.
XX KW Ribonucleotide reductase R1; 3'-untranslated region; 3'UTR; tumour;
XX KW housekeeping gene; identification; modulator; metastasis; neoplastic;
XX KW papilloma; atherosclerosis; angiogenesis; viral infection; ss.
XX OS Homo sapiens.
XX PN WO9800532-A2.
XX PD 08-JAN-1998.
XX PF 30-JUN-1997; 97WO-CA000454.
XX PR 01-JUL-1996; 96US-0021152P.
XX PA (WRIG/) WRIGHT J A.
XX PA (YOUNG/) YOUNG A H.
XX PI Wright JA, Young AH;
XX WPI; 1998-086958/08.
XX
XX New oligo-nucleotide(s) complementary to untranslated regions of
XX housekeeping genes - are useful in, e.g. identifying modulators of tumour
XX growth/metastasis and inhibiting growth of neoplastic cells.
XX
XX Claim 4; Page 29; 64pp; English.
XX
XX The present sequence represents a 3'-untranslated region (3'UTR) fragment
XX of ribonucleotide reductase R1. The present invention describes: (1)
XX oligonucleotides (ON) comprising at least 7 consecutive nucleotides (nt)
XX or their analogues of a UTR of a housekeeping gene; (2) antisense ON
XX (AON) complementary to ON; (3) ribozymes (Rb) complementary or homologous
XX to ON, and able to cleave it; (4) DNA sequence encoding ON, AON and Rb;
XX (5) an antibody (Ab) that binds to ON, AON, Rb and Ab are used to modulate
XX that hybridise to ON, AON and Rb. ON, AON, Rb and Ab are used to modulate
XX (especially inhibit) growth of tumour cells (especially neoplastic cells)
XX and to reduce their capacity for metastasis. The above may also be used
XX to treat benign proliferative disorders e.g. papillomas, atherosclerosis,
XX angiogenesis and viral infections, e.g. human immunodeficiency virus,
XX hepatitis or herpes. ON may further be used: (i) to identify modulators
XX of tumour growth/metastasis; (ii) to identify compounds (especially
XX potential antitumour agents) that inhibit or enhance interaction between
XX ON and its binding substances; (iii) as probes for detecting related
XX sequences, and (iv) to generate Ab, used for detection and quantification
XX of UTR especially for monitoring progress of cancer therapy. SON inhibit
XX tumorigenicity of neoplastic cells, particularly where these are
XX resistant to hydroxyurea
XX
XX Sequence 20 BP; 17 A; 1 C; 2 G; 0 T; 0 U; 0 Other;
XX SQ
```

```
Query Match 0.6%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
Qy 2709 AAAAAAAAAAAAAAAAAA 2726
Db 1 AAAAAAAAAAAAAAAAAA 18

RESULT 1414
AAC68768
ID AAC68768 standard; DNA; 20 BP.
XX AC
XX AAC68768;
XX 20-FEB-2001 (first entry)
XX Human FUT6 antisense oligonucleotide SEQ ID NO: 19.
XX Human; fucosyltransferase; FUT3; FUT6; cancer; antisense oligonucleotide;
XX PCR primer; ss.
XX Homo sapiens.
XX WO200064262-A1.
XX 02-NOV-2000.
XX 20-APR-2000; 2000WO-US010547.
XX 26-APR-1999; 99US-0131068P.
XX (UYNC-) UNIV NORTH CAROLINA.
XX Weston BW, Hiller KM;
XX WPI; 2000-687246/67.
XX Novel antisense human fucosyltransferase sequences useful for treating
XX cancer including breast, lung, gastric, renal and uterine cancer.
XX Claim 7; Page 33; 53pp; English.
XX The present invention provides antisense oligonucleotides to the human
XX fucosyltransferase coding sequences, particularly FUT3 and FUT6. These
XX antisense sequences can be used in the treatment of cancer, especially
XX colon, pancreatic, ovarian, gastric, breast, lung, hepatocellular,
XX prostate, bladder, renal cell and uterine cancers. In addition, they can
XX also be used in the treatment of animals such as dogs, cats and horses
XX
XX Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2565 TCTCCTGAGCTAGGAAGA 2582
Db 3 TCTCCTGAGCTAGGAAGA 20

RESULT 1415
AAA91207/C
ID AAA91207 standard; DNA; 20 BP.
XX AC
XX AAA91207;
XX 08-MAY-2001 (first entry)
XX Antisense IGFBP-5 inhibitor #13.
XX Insulin-like growth factor binding protein-5; IGFBP-5; human;
XX antisense oligonucleotide; hormone-regulated cancer; prostatic cancer;
XX breast cancer; therapy; ss.
XX Homo sapiens.
XX
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PN WO200105435-A2.
XX 25-JAN-2001.
XX 19-JUL-2000; 2000WO-CA000853.
XX 19-JUL-1999; 99US-0144495P.
XX (UYBR-) UNIV BRITISH COLUMBIA.
XX (MIYA/) MIYAKE H.
XX Gleave M;
XX WPI; 2001-168448/17.
XX Composition for treating hormone-regulated cancer, e.g. breast and
XX prostatic tumors, comprising an antisense oligonucleotide that inhibits
XX expression of insulin like growth factor binding protein-5 by hormone-
XX regulated tumor cells.
XX Disclosure; Page 34; 45pp; English.
XX This sequence represents an antisense oligonucleotide targeted against
XX human insulin-like growth factor binding protein-5 (IGFBP-5). The
XX invention relates to a composition for treatment of hormone-regulated
XX cancer, comprising an antisense oligonucleotide (such as this sequence)
XX which inhibits expression of IGFBP-5 by hormone-regulated tumor cells.
XX The compositions is useful for delaying progression of hormone-regulated
XX tumor cells such as prostatic cancer cells or breast cancer cells, to an
XX androgen-independent state, by treating hormone sensitive tumor cells
XX with the antisense sequence which inhibits expression of IGFBP-5 by the
XX tumor cells. The composition can also be used for treating a hormone-
XX responsive cancer in an individual, and administering the composition to
XX the individual after initiation of hormone-withdrawal to induce apoptotic
XX cell death of hormone-responsive tumor cells, and therefore delaying the
XX progression of hormone-responsive cancer cells to a hormone-independent
XX state in the individual. It can also be used for inhibiting or delaying
XX metastatic bone progression of an IGF-1 sensitive tumor in a mammal, by
XX administering the composition to inhibit the expression of IGFBP-5 by the
XX hormone-responsive cancer cells, and therefore inhibiting or delaying
XX metastatic bone progression of the tumor
XX
XX Sequence 20 BP; 3 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAA 2725
Db 18 TGAATAAAAAAAAAAAAAAAAA 1

RESULT 1416
ADF87936/C
ID ADF87936 standard; DNA; 20 BP.
XX AC
XX ADF87936;
XX 26-FEB-2004 (first entry)
XX Single nucleotide polymorphism detection primer, SEQ ID No 1519.
XX human; single nucleotide polymorphism; microarray; side effect; ss;
XX primer; PCR.
XX Synthetic.
XX Homo sapiens.
XX JP2003235571-A.
XX 26-AUG-2003.
XX
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XX DR WPI; 2003-093058/08.
XX
XX Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
XX Claim 15; SEQ ID NO 774; 763pp; English.
XX
XX This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has anti-allergic, anti-inflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
XX Sequence 20 BP; 17 A; 2 C; 1 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 16.4; DB 1; Length 20;
XX Best Local Similarity 94.4%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2724
Db | | | | | | | | | | | | | | | | | | | | | |
3 CCAAAAAA 20

RESULT 1419
ADH66380/C
ID ADH66380 standard; DNA; 20 BP.
XX
XX ADH66380;
XX
XX 25-MAR-2004 (first entry)
XX
XX Human glucocorticoid receptor-specific antisense oligonucleotide #3214.
DE
XX antisense oligonucleotide; glucocorticoid receptor; infection;
XX inflammation; tumour formation; diabetes; obesity;
KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
XX Homo sapiens.
OS
XX WO2003099215-A2.
PN
XX 04-DEC-2003.
XX
XX

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PF 20-MAY-2003; 2003WO-US016084.
XX
XX 20-MAY-2002; 2002US-0381857P.
XX
XX (PHAA ) PHARMACIA CORP..
XX
XX Crosby SD, Nalseth AE;
XX
XX WPI; 2004-035034/03.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT cardiovascular disorder, hyperlipidaemia or Cushing's syndrome.
XX
XX Claim 4; SEQ ID NO 3214; 985pp; English.
XX
XX The invention comprises an antisense oligonucleotide that are targeted
CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC antisense oligonucleotides of the invention are useful for preventing or
CC delaying infection, inflammation or tumour formation. The antisense
CC oligonucleotides are also useful for treating diabetes, obesity,
CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC present DNA sequence represents an antisense oligonucleotide that targets
CC the human glucocorticoid receptor gene. NOTE: The present sequence
CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
XX Sequence 20 BP; 2 A; 1 C; 1 G; 16 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 16.4; DB 1; Length 20;
XX Best Local Similarity 94.4%; Pred. No. 1.1e+03;
XX Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAA 2725
Db | | | | | | | | | | | | | | | | | | | | | |
18 TCAAAAAA 1

RESULT 1420
ADJ61530
ID ADJ61530 standard; DNA; 20 BP.
XX
XX AC ADJ61530;
XX
XX 06-MAY-2004 (first entry)
XX
XX Oligonucleotide associated to IL5R-X61176 #222.
DE
XX
XX interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW airway inflammation; allergy; asthma; impeded respiration;
KW cystic fibrosis; acute respiratory distress syndrome;
KW pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW ss.
XX
XX Homo sapiens.
OS
XX WO2004011613-A2.
XX
XX 05-FEB-2004.
XX
XX 25-JUL-2003; 2003WO-US023509.
PF
XX 29-JUL-2002; 2002US-0399076P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Tang L, Sandrasagra A, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
XX WPI; 2004-203534/19.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codons and introns of respiratory disease-relevant genes e.g.,
PT CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory

```

PT disease e.g., asthma.
XX Claim 2; SEQ ID NO 2386; 85pp; English.
XX
CC The present invention relates to an oligonucleotide anti-sense to e.g.,
CC initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC end of nucleic acid target comprising gene(s) chosen from e.g.
CC interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC oligonucleotide. The method is useful for preventing or treating a
CC oligonucleotide. The method is useful for preventing or treating a
CC respiratory or lung disease, which involves administering to the airways
CC of a subject an effective amount of an inhibitor. The oligonucleotide is
CC useful for production of a medicament for the prevention and/or treatment
CC of a respiratory or lung disease. The respiratory or lung disease is
CC chosen from airway inflammation, allergy(ies), asthma, impeded
CC respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC obstruction. The present sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;
Query Match 0.6%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1969 CTTTGCTGATGATATAAG 1986
Db 1 CTTTGCTGAGGATATAAG 18
RESULT 1421
ADK73725/c
ID ADK73725 standard; DNA; 20 BP.
XX
AC ADK73725;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1059.
XX
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
PF 14-AUG-2003; 2003WO-US025465.
XX
PR 14-AUG-2002; 2002US-0403416P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Roberds SL;
XX
DR WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 1059; 417pp; English.
PS
XX The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition

CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'WOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 1 A; 2 C; 1 G; 16 T; 0 U; 0 Other;
Query Match 0.6%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.1e+03;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2708 TAAAAAATAAAAAA 2725
Db 18 TCAAAAAAATAAAAAA 1
RESULT 1422
ADO46920
ID ADO46920 standard; DNA; 20 BP.
XX
AC ADO46920;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human oligonucleotide #2286.
XX
KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Botaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
OS Homo sapiens.
XX
PN US2004049022-A1.
XX
PD 11-MAR-2004.
XX
PF 25-JUL-2003; 2003US-00627930.
XX
PR 23-APR-2002; 2002WO-US013135.
PR 23-APR-2002; 2002WO-US013143.
XX
XX (NYCE/) NYCE J W.
PA (SAND/) SANDRASAGRA A.
PA (TANG/) TANG L.
PA (AGUI/) AGUILAR D.
PA (MILL/) MILLER S.
PA (SHAH/) SHAHABUDDIN S.
PA (LUHH/) LU H.
PA (CONG/) CONG H.
XX
XX Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX WPI; 2004-293804/27.
XX
XX Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
PT asthma.
XX
XX Claim 2; SEQ ID NO 2386; 174pp; English.
PS

XX The invention relates to oligonucleotides anti-sense to an initiation
 CC codon, coding region, 5' or 3' intron-exon junction, intron or region
 CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
 CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
 CC -5 receptor, CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
 CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
 CC also relates to a method of screening a candidate compound that binds to
 CC one or more nucleic acid target(s) or expressed product(s), for the
 CC prevention and/or treatment of a respiratory or lung disease. The
 CC oligonucleotides are useful for reducing or inhibiting expression of a
 CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
 CC CCR1, CCR3, Botaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
 CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
 CC useful for preventing or treating a respiratory or lung disease. The
 CC respiratory or lung disease is associated with hyper-responsiveness to
 CC and/or increased levels of, adenosine and/or levels of adenosine A
 CC receptor(s), and/or asthma and/or lung allergies associated with
 CC inflammation or an inflammatory disease. The respiratory or lung disease
 CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
 CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
 CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
 CC hypertension, lung inflammation, bronchitis, airway obstruction or
 CC bronchoconstriction. This sequence represents an oligonucleotide of the
 CC invention.

XX SQ Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1969 CTTTGCTGATGATAAAG 1986
 DB 1 CTTTGCTGAGGATAAAG 18
 |||||

RESULT 1423
 ADP69379/c
 ID ADP69379 standard; DNA; 20 BP.
 AC ADP69379;
 DT 09-SEP-2004 (first entry)
 DE Human mitonEET-specific antisense oligonucleotide #273.
 KW human; antisense oligonucleotide; mitochondrial membrane;
 KW insulin sensitising antidiabetic thiazolidinediones; mitonEET; diabetes;
 KW immunological disorder; cardiovascular disorder; including hypertension;
 KW neurological disorders; ischaemia; reperfusion; ss;
 KW 2'-methoxyethyl gapmer; 2'-MOE gapmer; phosphorothioate backbone.
 OS Homo sapiens.
 XX WO2004053060-A2.
 XX 24-JUN-2004.
 XX 25-NOV-2003; 2003WO-US037621.
 XX 06-DEC-2002; 2002US-0431529P.
 XX (PHAA) PHARMACIA CORP.
 XX Colca JR;
 XX WPI; 2004-468836/44.
 XX New antisense oligonucleotides encoding mitonEET, useful for modulating
 PT mitonEET expression or for treating diseases associated with mitonEET,
 PT e.g. diabetes, immunological disorders or cardiovascular disorders.

PS Claim 4; SEQ ID NO 273; 226pp; English.
 XX The invention comprises antisense oligonucleotides that are targeted to
 CC the nucleic acids encoding a family of human proteins from mitochondrial
 CC membranes, which bind insulin sensitising antidiabetic
 CC thiazolidinediones (referred to as: mitonEET). The antisense
 CC oligonucleotides of the invention are useful for modulating mitonEET
 CC expression and for treating diseases or conditions associated with
 CC mitonEET, such as: diabetes, immunological disorders, cardiovascular
 CC disorders including hypertension, neurological disorders, and
 CC ischaemia/reperfusion injuries. The present DNA sequence represents a
 CC mitonEET-specific antisense oligonucleotide of the invention. NOTE: The
 CC present sequence is a 2'-methoxyethyl (2'-MOE) gapmer with a
 CC phosphorothioate backbone.

XX SQ Sequence 20 BP; 3 A; 0 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16.4; DB 1; Length 20;
 Best Local Similarity 94.4%; Pred. No. 1.1e+03;
 Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAA 2725
 DB 18 TAAAAAATAAAAAA 1
 |||||

RESULT 1424
 AAX18389/c
 ID AAX18389 standard; DNA; 18 BP.
 AC AAX18389;
 DT 11-MAY-1999 (first entry)
 DE RT-PCR primer of the invention SEQ ID 30.
 KW RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
 OS Synthetic.
 XX JP11032765-A.
 XX 09-FEB-1999.
 XX 18-JUL-1997; 97JP-00208312.
 XX 18-JUL-1997; 97JP-00208312.
 XX (TAKI) TAKARA SHUZO CO LTD.
 XX WPI; 1999-183822/16.
 XX Peptides having at least two new nucleotides - useful as primers in RT-
 PT PCR.

XX Example 1; Page 12; 19pp; Japanese.
 XX This sequence represents a primer of the invention. The invention relates
 CC to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta
 CC -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or
 CC a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n =
 CC natural number indicating the repetition of alpha; beta, delta = V or N;
 CC V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or
 CC thymine; gamma = thymine; k = natural number of 3 or over indicating the
 CC repetition of gamma, in which thymine expressed by gamma is composed of
 CC 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are
 CC useful as primers for RT-PCR and determination of base sequences. The new
 CC sequences allow for reproductive and highly efficient analysis of gene
 CC sequences

XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 2 Other;

Query Match 0.6%; Score 16.2; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.1e+03; Mismatches 0; Indels 0; Gaps 0;
Matches 16; Conservative 1;

QY 2708 TAAAAAATAAAAAAAAAA 2724
:|||||
Db 17 BAAAAAATAAAAAAAAAA 1

RESULT 1425

AAAX18368/c

ID AAX18368 standard; DNA; 16 BP.

XX AC AAX18368;

XX DT 11-MAY-1999 (first entry)

XX DE RT-PCR primer of the invention SEQ ID 9.

XX KW RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.

XX OS Synthetic.

XX PN JP11032765-A.

XX PD 09-FEB-1999.

XX PF 18-JUL-1997; 97JP-00208312.

XX PR 18-JUL-1997; 97JP-00208312.

XX PA (TAKI) TAKARA SHUZO CO LTD.

XX DR WPI; 1999-183822/16.

XX PT Peptides having at least two new nucleotides - useful as primers in RT-PCR.

XX PS Disclosure; Page 10; 19pp; Japanese.

XX CC This sequence represents a primer of the invention. The invention relates to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta-N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n = natural number indicating the repetition of alpha; beta, delta = V or N; V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or thymine; gamma = thymine; k = natural number of 3 or over indicating the repetition of gamma, in which thymine expressed by gamma is composed of 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are useful as primers for RT-PCR and determination of base sequences. The new sequences allow for reproductive and highly efficient analysis of gene sequences

XX SQ Sequence 16 BP; 1 A; 0 C; 1 G; 14 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAA 2722
|||||
Db 16 CTAAAAAATAAAAAAAAA 1

RESULT 1426

AAAX07568

ID AAX07568 standard; cDNA; 16 BP.

XX AC AAX07568;

XX DT 21-JUN-1999 (first entry)

XX DE Homo sapiens fetal kidney clone AK647 secreted protein gene 3' end.

XX SQ Sequence 16 BP; 1 A; 0 C; 1 G; 14 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 1427

AAC66068

ID AAC66068 standard; DNA; 16 BP.

XX AC AAC66068;

XX DT 22-FEB-2001 (first entry)

XX DE DNA chip primer #4.

XX KW DNA chip; primer; nucleoside derivative; photolabile protecting group; photolithographic nucleic acid chip; ss.

XX OS Synthetic.

XX PN WO200061594-A2.

XX PD 19-OCT-2000.

XX PF 07-APR-2000; 2000WO-DE001148.

XX PR 08-APR-1999; 99DE-01015867.

XX PR 28-JAN-2000; 2000DE-01003631.

KW Secreted protein; fetal kidney; ds.

XX OS Homo sapiens.

XX PN WO9900405-A1.

XX PD 07-JAN-1999.

XX PF 29-JUN-1998; 98WO-US013530.

XX PR 30-JUN-1997; 97US-00885610.

XX PA (GEMY) GENETICS INST INC.

XX PI Jacobs K, McCoy JM, Lavallie ER, Racie LA, Merberg D, Treacy M;

XX PT Evans C, Agostino MJ;

XX DR WPI; 1999-095671/08.

XX PT New polynucleotides encoding secreted human proteins - are derived from foetal kidney or adult retina cDNA libraries, used as, e.g. potential vaccines.

XX PS Disclosure; Page 54; 76pp; English.

XX CC The sequence is that of the 3' end of a sequence encoding a secreted protein from a human fetal kidney clone AK296. Such a sequence is predicted to have biological activities which would make them suitable for treating, preventing or ameliorating medical conditions in humans and animals, although no supporting data is given. Suggested activities include nutritional activity, cytokine and cell proliferation/differentiation activity, immune stimulating (e.g. as vaccines) or suppressing activity, haematopoiesis regulating activity, tissue growth activity, activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic and thrombolytic activity, receptor/ligand activity, anti-inflammatory activity, cadherin/tumour invasion suppressor activity, and tumour inhibition activity. It is also stated to be useful for gene therapy

XX SQ Sequence 16 BP; 16 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAATAAAAAAAAA 2724

|||||

Db 1 AAAAAAATAAAAAAAAA 16

RESULT 1427

AAC66068

ID AAC66068 standard; DNA; 16 BP.

XX AC AAC66068;

XX DT 22-FEB-2001 (first entry)

XX DE DNA chip primer #4.

XX KW DNA chip; primer; nucleoside derivative; photolabile protecting group; photolithographic nucleic acid chip; ss.

XX OS Synthetic.

XX PN WO200061594-A2.

XX PD 19-OCT-2000.

XX PF 07-APR-2000; 2000WO-DE001148.

XX PR 08-APR-1999; 99DE-01015867.

XX PR 28-JAN-2000; 2000DE-01003631.

XX (DEKR-) DEUT KREBSFORSCHUNGSZENTRUM.
 XX
 PI Beier M, Hoheisel J;
 XX
 DR WPI; 2000-679457/66.
 XX
 XX New nucleoside derivatives with photolabile protecting groups, useful in
 PT oligonucleotide synthesis, particularly on solid phases, e.g. for
 PT hybridization testing.
 XX
 XX Disclosure; Fig 9; 48pp; German.
 XX
 XX This invention describes nucleoside derivatives (I) with photolabile
 CC protecting groups. (I) are used to synthesize oligonucleotides using the
 CC photolithographic nucleic acid chip method, particularly where these are
 CC intended for performing enzymatic reactions initiated from a free 3'-
 CC hydroxy (especially solid-phase polymerase reactions or ligase reactions,
 CC but also reverse transcription, cDNA synthesis etc.), also for
 CC hybridization testing, sequencing and in DNA computing. (I) are produced
 CC with high selectivity by reaction with a mild acylating agent that has
 CC high specificity for the 3'-position, without significant side-reactions
 CC (cf. more reactive acylating agents such as chloroformates)
 XX
 SQ Sequence 16 BP; 16 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db 1 AAAAAAAAAAAAAA 16
 RESULT 1428
 ABA04585/C
 ID ABA04585 standard; DNA; 16 BP.
 XX
 AC ABA04585;
 XX
 XX 15-FEB-2002 (first entry)
 XX
 DE Oligonucleotide #5.
 XX
 KW Analytical support; genomic sequencing; mutation detection;
 KW pharmaceutical development; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1 /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER = Fl(CH2)6-PO-thymine, where Fl is flavine
 FT and PO is a phosphate group"
 XX
 XX FR2805348-A1.
 XX
 XX 24-AUG-2001.
 XX
 XX 23-FEB-2000; 2000FR-00002236.
 XX
 XX 23-FEB-2000; 2000FR-00002236.
 XX
 XX (COMS) COMMISSARIAT ENERGIE ATOMIQUE.
 XX
 XX Cuzin M, Peltie P, Fontecave M, Decout JL, Dueymes C;
 XX
 XX WPI; 2001-628265/73.
 XX
 XX Support for hybridization analysis of nucleic acids for sequencing
 PT techniques, comprises an array of oligonucleotides having a label where

PT the fluorescence changes follow hybridization.
 XX
 PS Example 1; Page 12; 33pp; French.
 XX
 CC The present invention relates to an analytical support, to which a number
 CC of oligonucleotides are fixed. The oligonucleotides are labelled with a
 CC fluorescent compound, the fluorescence of which varies when the
 CC oligonucleotide hybridises to its complement. The analytical support is
 CC useful in hybridisation testing for identification of specific nucleic
 CC acids, such as genomic sequencing, detecting mutations or pharmaceutical
 CC development. The present oligonucleotide was used to illustrate the
 CC invention
 XX
 SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db 16 AAAAAAAAAAAAAA 1
 RESULT 1429
 AAF30895/C
 ID AAF30895 standard; DNA; 16 BP.
 XX
 AC AAF30895;
 XX
 XX 09-JUL-2001 (first entry)
 XX
 XX Oligonucleotide-minor groove binder complex.
 XX
 KW ODN-MGB-LF; oligonucleotide; minor groove binder; latent fluorophore;
 KW hybridisation; detection; fluorescence; probe; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1 /tag= a
 FT /note= "thymine modified by a minor groove binder (2-
 FT dimethylaminonaphthalene-6- sulfonamide"
 XX
 XX WO200131063-A1.
 XX
 XX 03-MAY-2001.
 XX
 XX 26-OCT-2000; 2000WO-US029786.
 XX
 XX 26-OCT-1999; 99US-00428236.
 XX
 XX (EPOC-) EPOCH BIOSCIENCES INC.
 XX
 XX Dempcy RO, Afonina IA, Vermeulen NMJ;
 XX
 XX WPI; 2001-328656/34.
 XX
 XX Conjugate of oligonucleotide, minor groove binder and latent fluorophore,
 PT useful for detecting specific nucleic acids, e.g. for single-nucleotide
 PT mismatch discrimination.
 XX
 XX Disclosure; Page 101; 105pp; English.
 PS
 XX
 CC The present sequence is that of an oligonucleotide (ODN)-minor groove
 CC binder (MGB) complex. MGBs bind in a non-intercalating manner to the
 CC minor groove of non-single-stranded DNA, RNA or their hybrids. ODN-MGB-LF
 CC conjugates of the invention also comprise a latent fluorophore (LF),
 CC which binds similarly to the MGB but in an intercalating manner, or lies
 CC in the minor groove, or is oriented in some other way to the DNA molecule
 CC by MGB, such that it becomes fluorescent (or its fluorescent properties
 CC change detectably). The conjugates are used as hybridisation probes and

CC amplification primers for fluorescent detection of specifically
CC hybridising sequences, for analysis or diagnosis, especially (real-time)
CC PCR, for single-nucleotide mismatch discrimination, target or signal
CC amplification, array-based assays and sequencing, including detection of
CC double-stranded DNA by triplex formation
XX
SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1

RESULT 1430
AAF30880/c
ID AAF30880 standard; DNA; 16 BP.
XX
AC AAF30880;
XX
DT 09-JUL-2001 (first entry)
XX
DE Oligonucleotide portion of ODN-MGB-LF conjugate.
XX
KW ODN-MGB-LF; oligonucleotide; minor groove binder; latent fluorophore;
KW hybridisation; detection; fluorescence; probe; ss.
XX
OS Synthetic.
XX
PN WO200131063-A1.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029786.
XX
PR 26-OCT-1999; 99US-00428236.
XX
PA (EPOCH-) EPOCH BIOSCIENCES INC.
XX
PI Dempcy RO, Afonina IA, Vermeulen NMJ;
XX
DR WPI; 2001-328656/34.
XX
XX Conjugate of oligonucleotide, minor groove binder and latent fluorophore,
PT useful for detecting specific nucleic acids, e.g. for single-nucleotide
PT mismatch discrimination.
XX
PS Disclosure; Page 58; 105pp; English.
XX
CC The present sequence is that of the oligonucleotide (ODN) component of an
CC ODN-MGB (minor groove binder)-LF (latent fluorophore) conjugate of the
CC invention. MGBs bind in a non-intercalating manner to the minor groove of
CC non-single-stranded DNA, RNA or their hybrids, while a LF binds similarly
CC but in an intercalating manner, or lies in the minor groove, or is
CC oriented in some other way to the DNA molecule by MGB, such that it
CC becomes fluorescent (or its fluorescent properties change detectably).
CC The conjugates are used as hybridisation probes and amplification primers
CC for fluorescent detection of specifically hybridising sequences, for
CC analysis or diagnosis, especially (real-time) PCR, for single-nucleotide
CC mismatch discrimination, target or signal amplification, array-based
CC assays and sequencing, including detection of double-stranded DNA by
CC triplex formation. Many different targets can be detected a single
CC reaction vessel. The present ODN-MGB-LF conjugate was used to demonstrate
CC hybridisation-triggered fluorescence. Upon hybridisation to the
CC complementary target sequence there was an increase in fluorescence
CC yield, measured as the ratio of the fluorescence emitted by the hybrid
CC between the ODN-MGB-LF conjugate and its target sequence to the
CC fluorescence emitted by unhybridised (i.e. single-stranded) ODN-MGB-LF,
CC of 8.3
XX

SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1

RESULT 1431
AAH42481/c
ID AAH42481 standard; DNA; 16 BP.
XX
AC AAH42481;
XX
DT 01-OCT-2001 (first entry)
XX
DE Oligonucleotide used to produce branched chain compounds.
XX
KW Branched chain compound; nucleic acid synthesis; primer extension;
KW reverse transcription; nucleic acid hybridization;
KW nucleic acid amplification; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*note= "COOH attached"
FT misc_feature 2..3 /*tag= c
FT /*note= "branch present"
FT modified_base 2 /*tag= b
FT /*note= "COOH attached"
XX
EP11111068-A1.
XX
PD 27-JUN-2001.
XX
PF 21-DEC-1999; 99EP-00125484.
XX
PR 21-DEC-1999; 99EP-00125484.
XX
PA (LION-) LION BIOSCIENCE AG.
PA (VBCG-) VBC GENOMICS GMBH.
XX
PI Schmidt W, Hiller R, Huber M, Mueller M;
XX
DR WPI; 2001-466959/51.
XX
XX Branched compounds useful in e.g. nucleic acid synthesis reaction
PT comprises nucleic acid moieties optionally extended by a polymerase.
XX
PS Example 1; Page 10; 31pp; English.
XX
CC The specification describes branched compounds containing nucleic acid
CC moieties optionally extended by a polymerase. The branched chain
CC compounds of the invention are used in nucleic acid synthesis reaction,
CC primer extension reaction, reverse transcription reaction of RNA into
CC DNA, nucleic acid hybridization experiment (for identifying sequence of a
CC nucleic acid), and nucleic acid amplification experiment (for analysing
CC the expression pattern of genes). The compounds are also used in solid-
CC phase enzymatic reactions. The present sequence was used in the course of
CC the invention to produce branched chain compounds
XX
SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1

RESULT 1432
ABA97402/C
ID ABA97402 standard; DNA; 16 BP.
XX
AC ABA97402;
XX
DT 18-JUN-2002 (first entry)
XX
DE Nucleotide sequence of oligomer # 1 used to test thermal stability.
XX
KW Protein nucleic acid molecule; PNA; ds.
XX
OS Synthetic.
XX
PN WO200168673-A1.
XX
PD 20-SEP-2001.
XX
PF 13-MAR-2001; 2001WO-US008111.
XX
PR 14-MAR-2000; 2000US-0189190P.
XX
PR 30-NOV-2000; 2000US-0250334P.
XX
PA (ACTI-) ACTIVE MOTIF.
XX
PI Efimov V, Fernandez J, Archdeacon D, Archdeacon J;
PI Chakhmakchev O, Buryakova A, Choob M, Hondorp K;
XX
DR WPI; 2002-041177/05.
XX
PT Oligonucleotides analogs useful in detection, separation and purification
PT of nucleic acid molecules, comprise monomers, dimers and oligomers.
XX
PS Example 17; Page 118; 197pp; English.
XX
CC This invention relates to oligonucleotide analogues comprising a protein
CC nucleic acid molecule (PNA) monomer. They are used in the detection and
CC separation of nucleic acid molecules and as probes, primers, linkers,
CC adapters and antisense agents on solid supports. Modifications enhance
CC their use as capture and detection probes e.g. by the incorporation of
CC biotin, digoxigenin, radioisotopes, fluorescent labels such as
CC fluorescein and reporter molecules, such as alkaline phosphatase. They are
CC also used for enhancing or inhibiting the activity of an enzyme or
CC cellular activity. The compounds are stable to nucleases and proteases,
CC have high affinity, binding specificity and solubility. The polyamide
CC backbone of PNAs is resistant to both nucleases and proteases. PNAs bind
CC nucleic acid molecules with greater affinity than DNA or RNA
CC concentration. The compounds are relatively simple to synthesize and are
CC used in a wide variety of applications. This sequence represents a DNA
CC oligomer which is used to represent the thermal stability of the
CC oligomers of the invention
XX
SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1

RESULT 1433
AAD56451/C
ID AAD56451 standard; DNA; 16 BP.
XX
XX

```

```

AC AAD56451;
XX
DT 07-AUG-2003 (first entry)
XX
DE 2'F-ANA antisense oligo #6, to elicit RNase H degradation of target RNA.
XX
KW Acyclic linker; gene expression; gene therapy; ribonuclease; RNase H;
KW antisense; ss.
XX
OS Unidentified.
XX
PH Key Location/Qualifiers
FT modified_base 1..16
FT /tag= a
FT /mod_base= OTHER
FT /note= "2'-deoxy-2'-fluoroarabinothymidine"
FT misc_feature 8..9
FT /tag= b
FT /note= "Bases 8 and 9 are linked by two secouridine
FT linkers which is represented as S in page 49 and X in
FT page 57 and Fig 7 and 8 of the specification"
XX
PN WO2003037909-A1.
XX
PD 08-MAY-2003.
XX
PR 29-OCT-2002; 2002WO-CA001628.
XX
PR 29-OCT-2001; 2001US-0330719P.
XX
PA (UYMC-) UNIV MCGILL.
XX
PI Damha MJ, Viazovkina E, Mangos MM, Parniak MA, Min K;
XX
DR WPI; 2003-421516/39.
XX
PT Novel acyclic linker-containing oligonucleotide useful for preventing or
PT decreasing translation, reverse transcription and/or replication of a
PT target RNA in a system, comprises a modified deoxyribonucleotide.
XX
PS Example 2; Fig 7; 104pp; English.
XX
CC The invention relates to an acyclic linker-containing oligonucleotide
CC comprising at least one modified deoxyribonucleotide. Oligonucleotides of
CC the invention are useful for preventing or decreasing translation,
CC reverse transcription and/or replication of a target RNA in a system.
CC They are useful for selectively preventing gene expression in a sequence-
CC specific manner, for hybridising to complementary RNA such as cellular
CC mRNA or viral RNA, to hybridise to and induce cleavage of complementary
CC RNA. They are also useful therapeutically in formulations or medicaments
CC to prevent or treat a disease characterised by the expression of a
CC particular target RNA. The invention is used in gene therapy. The present
CC sequence is an antisense oligo used to elicit human RNase (ribonuclease)
CC H degradation of target RNA. This sequence is used in the exemplification
CC of the invention
XX
SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1

RESULT 1434
AAL54078/C
ID AAL54078 standard; DNA; 16 BP.
XX
XX
AC AAL54078;
XX

```

DT 06-MAR-2003 (first entry)
 XX
 DE Oligo-homodeoxyribonucleotide sequence, oligo dT.
 XX
 KW Detection; single-stranded sensor; detectable fluorescence emission;
 KW forensic testing; paternity testing; tissue typing; hereditary disorder;
 KW human population genetics; human evolutionary history; cystic fibrosis;
 KW human haplotype diversity; Tay-Sachs; sickle-cell anaemia; ss.
 XX Unidentified.
 OS
 PN WO200284271-A2.
 XX
 XX 24-OCT-2002.
 XX
 PF 16-APR-2002; 2002WO-US012176.
 XX
 PR 16-APR-2001; 2001US-00836579.
 XX
 PA (REGC) UNIV CALIFORNIA.
 PA (CHAJ/) CHA J N.
 XX
 PI Cha JN, Morse DE, Stucky GD;
 XX
 XX WPI; 2003-103378/09.
 DR
 XX
 PT Detecting polynucleotides, for pharmacogenetic testing, comprises
 PT contacting a target polynucleotide with a complementary single-stranded
 PT sensor polynucleotide and an agent that allows the sensor to fluoresce
 PT upon excitation.
 XX
 XX Example 1; Page 25; 41pp; English.
 PS
 XX The invention relates to a novel assay for detecting a polynucleotide in
 CC a sample, which comprises: contacting a sample suspected of containing a
 CC target polynucleotide with a predetermined single-stranded sensor
 CC polynucleotide complementary to the target polynucleotide, in a solution
 CC comprising an agent that is a nonaqueous solvent that allows the sensor
 CC polynucleotide to produce a detectable fluorescence emission; exciting
 CC the sensor polynucleotide; and determining fluorescence emission. The
 CC assay is useful for detecting a single or double-stranded target
 CC polynucleotide, such as, DNA or RNA in a sample. The assay finds use in a
 CC wide variety of different applications including pharmacogenetic testing,
 CC forensic testing to identify the species or individual which was the
 CC source of a forensic specimen, in anthropological setting, paternity
 CC testing, testing for compatibility between prospective tissue or blood
 CC donors and patients and in screening for hereditary disorders. The method
 CC is also useful to study alterations of gene expression in response to a
 CC stimulus, disease, drug or medication, and other applications include
 CC human population genetics, analyses of human evolutionary history and
 CC characterisation of human haplotype diversity. The method is useful for
 CC detecting polynucleotide sequences from contaminants or pathogens
 CC including bacteria, yeast, and viruses to detect single nucleotide
 CC polymorphisms, which may be associated with particular alleles or subsets
 CC of alleles. The method is useful for detection of mutations and to detect
 CC nucleotide sequences associated with increased risk of diseases or
 CC disorders including cystic fibrosis, Tay-Sachs, and sickle-cell anaemia.
 CC This polynucleotide sequence represents an oligonucleotide sequence used
 CC in a fluorescence technique of the invention
 XX
 SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db 16 AAAAAAAAAAAAAA 1
 RESULT 1435
 ADB68519/c

ID ADB68519 standard; DNA; 16 BP.
 XX
 AC ADB68519;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE DNA hybridisation oligomer SEQ ID 9.
 XX
 KW hydroxyproline nucleic acid; HypNA; PNA; peptide nucleic acid;
 KW gene expression; respiration; secretion; signalling;
 KW ion-channel activity; cell motility; developmental phenotype;
 KW tumour regression; hybridisation; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_difference 1 /*tag= a
 FT /note= "Optional N-terminal acetyl"
 FT
 XX
 PN WO2003068798-A2.
 XX
 PD 21-AUG-2003.
 XX
 PF 07-FEB-2003; 2003WO-US003904.
 XX
 PR 09-FEB-2002; 2002US-00072975.
 XX
 PA (ACTI-) ACTIVE MOTIF.
 XX
 PI Efimov V, Fernandez J, Archdeacon D, Archdeacon J, Choob M;
 XX
 XX WPI; 2003-689653/65.
 DR
 XX Method of inhibiting expression of genes or RNA transcripts, useful for
 PT therapy and determining effects of genes, by administering oligomers
 PT containing hydroxyproline nucleic acid.
 XX
 XX Example 17; Page 233; 240pp; English.
 PS
 XX The invention relates to a novel method of inhibiting the expression of
 CC one or more genes or RNA transcripts by administering at least one
 CC oligonucleotide analogue that includes at least one hydroxyproline
 CC nucleic acid (HypNA) monomer to a cell or organism or their extracts. The
 CC oligonucleotides of the invention may be used to monitor properties
 CC including gene expression, respiration, secretion, signalling, ion-
 CC channel activity, cell motility, developmental phenotype and tumour
 CC regression. Furthermore, they may be utilised to determine the effects of
 CC particular genes, as antisense or homologous recombination constructs
 CC e.g. for creating animal models of disease and finally, for increasing
 CC the activity of some enzymes, such as polymerases. The current sequence
 CC is that of the DNA hybridisation oligomer SEQ ID 9 of the invention. This
 CC sequence may also comprise a peptide nucleic acid (PNA).
 XX
 SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db 16 AAAAAAAAAAAAAA 1
 RESULT 1436
 ADZ20614
 ID ADZ20614 standard; DNA; 16 BP.
 XX
 AC ADZ20614;
 XX
 DT 16-JUN-2005 (first entry)
 XX

DE DNA oligo #1 related to the DNA microarray.
XX
KW DNA detection; hybridization; DNA microarray; diagnosis; SNP detection;
KW pharmaceutical; forensic; ss.
XX
OS Synthetic.
XX
PN JP2003189868-A.
XX
PD 08-JUL-2003.
XX
PF 26-DEC-2001; 2001JP-00395236.
XX
PR 26-DEC-2001; 2001JP-00395236.
XX
PA (TOKE) TOSHIBA KK.
XX
DR WPI; 2003-819452/77.
XX
PT Analyzing nucleic acid by use of medium probe consisting of sequence
PT complementary to target sequence and sequence existing in nature at low
PT probability and probe for trapping which is complementary to medium
PT probe.
XX
PS Disclosure; Page 5; 14pp; Japanese.
XX
CC This invention relates to a novel method for nucleic acid analysis.
CC Specifically, it refers to a kit for performing nucleic acid detection
CC using a chip to identify a target polynucleotide sequence. The present
CC invention provides a chip (microarray) for nucleic-acid detection that
CC significantly reduces non-specific binding produced between a test-
CC substance nucleic acid and a DNA probe. As such, this method can be used
CC to detect the existence of a target sequence in a sample and for the
CC analysis of polymorphisms, expression analyses, and presence or absence
CC of a gene expression and SNPs, micro satellite sequences. Furthermore,
CC for diagnosis of disease by analyzing disease-related genes, estimation
CC of incidence risk rate, detection of infected existence, analysis of
CC virus type etc. This DNA microarray also has applications for various
CC clinical objectives and for the inspection of food stuffs, quarantine,
CC pharmaceutical, forensic medicine, agriculture, live stock forming,
CC fishing and forestry. This oligonucleotide sequence is a used in the
CC development of the DNA microarray of the invention.
XX
SQ Sequence 16 BP; 16 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAA 2724
Db 1 AAAAAAAAAAAAAA 16

RESULT 1437
ADI34487/c
ID ADI34487 standard; DNA; 16 BP.
XX
AC ADI34487;
XX
DT 22-APR-2004 (first entry)
XX
DE Nucleotide sequence of an oligo dT16.
XX
KW Nucleic acid amplification; RNA transcription; RNA polymerase; ss.
XX
OS Synthetic.
XX
PN WO2003102243-A1.
XX
PD 11-DEC-2003.
XX
PF 30-MAY-2003; 2003WO-US017103.

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAA 2724
Db 1 AAAAAAAAAAAAAA 16

RESULT 1438
AEB77257
ID AEB77257 standard; DNA; 16 BP.
XX
AC AEB77257;
XX
DT 20-OCT-2005 (first entry)
XX
DE Oligo, SEQ ID NO: 1, to make full-length coding sequence cDNA libraries.
XX
KW DNA library; ss.
XX
OS Unidentified.
XX
PN US2005175993-A1.
XX
PD 11-AUG-2005.
XX
PF 12-APR-2002; 2002US-00121641.
XX
PR 12-APR-2002; 2002US-00121641.
XX
PA (WEIC/) WEI C.
XX
PI Wei C;
XX
DR WPI; 2005-541755/55.
XX
PT Making full-length coding sequence cDNA libraries for research purposes
PT comprises binding a tag molecule (e.g. biotin or avidin) to a diol
PT structure present in the 5' cap site of an mRNA forming an RNA-DNA
PT hybrid.

XX 31-MAY-2002; 2002US-0384454P.
XX (JANC) JANSSEN PHARM NV.
XX
XX Kamme FC, Zhu JY;
XX
XX WPI; 2004-035466/03.
XX
XX Amplifying for RNA in a sample, useful for improving RNA polymerase based
XX RNA transcription from a polynucleotide template, comprises eliminating
XX single-stranded oligonucleotide from the transcription sample.
XX
XX Example 1; SEQ ID NO 6; 26pp; English.
XX
XX The invention relates to amplifying for RNA in a sample comprises
XX eliminating single-stranded oligonucleotide from the transcription
XX sample. The method involves synthesizing single-stranded cDNA by
XX incubating the sample RNA with reverse transcriptase and an
XX oligonucleotide primer that primes synthesis in a direction toward 5' end
XX of the RNA; converting the single-stranded cDNA into double-stranded cDNA
XX to form a transcription sample containing a cDNA template; eliminating
XX single-stranded oligonucleotide from the transcription sample; and
XX transcribing the cDNA template into RNA using an RNA polymerase. The
XX method is useful for improving RNA polymerase based RNA transcription
XX from a polynucleotide template. The method inhibits the undesired non-
XX template derived production of RNA in the transcription reaction.
XX Sequences ADI34483-ADI34489 represent oligonucleotides used in a T7 RNA
XX transcription reaction.
XX
SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1

RESULT 1438
AEB77257
ID AEB77257 standard; DNA; 16 BP.
XX
AC AEB77257;
XX
DT 20-OCT-2005 (first entry)
XX
DE Oligo, SEQ ID NO: 1, to make full-length coding sequence cDNA libraries.
XX
KW DNA library; ss.
XX
OS Unidentified.
XX
PN US2005175993-A1.
XX
PD 11-AUG-2005.
XX
PF 12-APR-2002; 2002US-00121641.
XX
PR 12-APR-2002; 2002US-00121641.
XX
PA (WEIC/) WEI C.
XX
PI Wei C;
XX
DR WPI; 2005-541755/55.
XX
PT Making full-length coding sequence cDNA libraries for research purposes
PT comprises binding a tag molecule (e.g. biotin or avidin) to a diol
PT structure present in the 5' cap site of an mRNA forming an RNA-DNA
PT hybrid.

XX Disclosure; SEQ ID NO 1; 13pp; English.

XX The present invention relates to a method for making cDNA libraries

XX wherein the cDNA inserts comprise the full-length of the coding sequences

XX but having lengths less than the full-length of the mRNA. The method of

XX the invention comprises binding a tag molecule to a diol structure

XX present in the 5' Cap sites of mRNAs, forming RNA-DNA hybrids by reverse

XX transcription to synthesize the first cDNA strand, separating RNA-DNA

XX hybrids carrying a DNA corresponding to full-length of mRNAs from RNA-DNA

XX hybrids formed above by using a function of the tag molecule and

XX synthesizing the second cDNA strand by self-priming the first cDNA

XX strand. The resulting cDNA libraries do not contain the full-length of

XX the mRNAs but do contain the full-length of the coding sequences of the

XX mRNAs. The invention is useful for making or constructing full-length

XX coding sequence cDNA libraries which may be utilized in researches in the

XX fields of medical science and biology. The present sequence is an

XX oligonucleotide used in making full-length coding sequences cDNA

XX libraries.

XX Sequence 16 BP; 16 A; 0 C; 0 G; 0 T; 0 U; 0 Other;

XX

Query Match 0.6%; Score 16; DB 1; Length 16;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2724

Db 1 AAAAAAAAAAAAAAAAAA 16

RESULT 1439

AEC34066/c

ID AEC34066 standard; DNA; 16 BP.

XX AEC34066;

XX

XX 03-NOV-2005 (first entry)

XX

XX Zea mays ZmRSPTP1 associated oligonucleotide #9.

DE

XX drought resistance; crop improvement; ZmRSPTP1; ss.

XX

XX Unidentified.

XX

XX CN1584034-A.

PN

XX

XX 23-FEB-2005.

PD

XX

XX 21-AUG-2003; 2003CN-00153941.

PF

XX

XX 21-AUG-2003; 2003CN-00153941.

PR

XX

XX (BEIJ-) BEIJING AGRIC BIOTECHNOLOGY RES CENT.

PA

XX

XX Jia W, Wu Z, Huang C;

PI

XX

XX WPI; 2005-406151/42.

DR

XX

XX Corn tyrosin protein phosphatase gene and its coding protein and use.

PT

XX

XX Example 2; Page 6; 13pp; Chinese.

PS

XX

XX The invention describes a ZmRSPTP1 gene, its coding protein and use. The

CC ZmRSPTP1 gene is one of the following ribonucleotide sequence: 1) SEQ ID

CC No:1 in sequential table; 2) ribonucleotide sequence of coded SEQ ID No:2

CC protein sequence; 3) DNA sequence having 90% homology with DNA sequence

CC refined by SEQ ID No:1 in sequential table. It can be used to breed

CC drought-resistant plant and corn. This sequence represents an

CC oligonucleotide associated with the isolation of ZmRSPTP1.

XX

XX Sequence 16 BP; 1 A; 0 C; 0 G; 15 T; 0 U; 0 Other;

XX

Query Match 0.6%; Score 16; DB 1; Length 16;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2723

Db 16 TAAAAAAAAAAAAAAAAA 1

RESULT 1440

AED63168/c

ID AED63168 standard; DNA; 16 BP.

XX AED63168;

XX

XX 29-DEC-2005 (first entry)

DT

XX Family 16/15(inv(alpha.alpha))4 nucleotide fragment.

DE

XX gene amplification; gene mapping; gene sequencing; ss.

XX

XX Synthetic.

OS

XX

XX Key Location/Qualifiers

FH modified_base 1

FT /*tag= a

FT /mod_base= other

FT /note= '5'-phosphorylated"

FT 16

FT modified_base

FT /*tag= b

FT /mod_base= other

FT /note= "3'-phosphorylated"

XX

XX WO2005100607-A1.

PN

XX

XX 27-OCT-2005.

PD

XX

XX 08-APR-2005; 2005WO-US011812.

PF

XX

XX 09-APR-2004; 2004US-0563283P.

PR

XX 26-APR-2004; 2004US-0565284P.

XX

XX (UYBO-) UNIV BOSTON.

PA

XX

XX Cantor CR, Siddiqi PA;

PI

XX

XX WPI; 2005-725959/74.

DR

XX

XX Determining a target nucleic sequence comprises cleaving transcript of

PT sequence in a sequence-specific manner, determining molecular weight of

PT fragments, performing fragment identity mapping and comparing the

PT observed mass.

XX

XX Example 1; SEQ ID NO 27; 92pp; English.

PS

XX

XX The invention relates to determining a target sequence of a template

CC nucleic acid. The method involves: creating a transcript of an isolated

CC template nucleic acid using polymerase enzyme and nucleosides selected

CC for sequence specific reactivity and molecular weight and oligonucleotide

CC primers; performing a cleavage reaction resulting in complete cleavage of

CC the transcript in a cleavage-specific manner into fragments using cutters

CC selected from the group consisting of enzymatic cutters, chemical

CC cutters, and their combination; analyzing the cleavage reaction products

CC to determine the molecular weights of the fragments; performing fragment

CC identity mapping using nucleotide masses and cleavage specificities of

CC the cutters to calculate the molecular weights and sequences of all

CC possible fragments that result from the second step with the fragment;

CC and comparing the masses observed in the third step with the fragment

CC identity mapping, where the comparison results in determining a target

CC the target sequences present in the sample. In determining a target

CC sequence of a template nucleic acid, the steps are performed at least two

CC times with different cutters, thus allowing production of overlapping

CC fragments, and compiling the overlapping fragments to produce at least

CC

CC one larger subsequence. The larger subsequence is the complete sequence
 CC of the template. The primers are sequence specific and have a random
 CC sequence. The molecular weight is determined using mass spectroscopy
 CC which is matrix-assisted laser desorption/ionization time-of-flight
 CC spectroscopy. The method allows de novo detection of sequences in a
 CC target nucleic acid without requiring any prior sequence information.
 CC Also provided is a method for determining the number of genes in a
 CC nucleic acid sample. Sequences AED63145-AED63168 represent modified
 CC fragments produced during fragment identity mappings for
 CC 16/15(inv(alpha.alpha)):4 family.
 XX
 SQ Sequence 16 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db 16 AAAAAAAAAAAAAA 1
 RESULT 1441
 AED63150
 ID AED63150 standard; DNA; 16 BP.
 XX
 AC AED63150;
 XX
 DT 29-DEC-2005 (first entry)
 XX
 DE Family 16/15(inv(alpha.alpha)):4 nucleotide fragment.
 XX
 KW gene amplification; gene mapping; gene sequencing; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= other
 FT /note= "5'-phosphorylated"
 FT modified_base 16 /*tag= b
 FT /mod_base= other
 FT /note= "3'-phosphorylated"
 XX
 PN WO2005100607-A1.
 XX
 PD 27-OCT-2005.
 XX
 XX 08-APR-2005; 2005WO-US011812.
 XX
 PR 09-APR-2004; 2004US-0563283P.
 PR 26-APR-2004; 2004US-0565284P.
 XX
 PA (UYBO-) UNIV BOSTON.
 XX
 XX Cantor CR, Siddiqi FA;
 PI
 XX WPI; 2005-725959/74.
 DR
 XX
 PT Determining a target nucleic sequence comprises cleaving transcript of
 PT sequence in a sequence-specific manner, determining molecular weight of
 PT fragments, performing fragment identity mapping and comparing the
 PT observed mass.
 XX
 PS Example 1; SEQ ID NO 9; 92pp; English.
 XX
 CC The invention relates to determining a target sequence of a template
 CC nucleic acid. The method involves: creating a transcript of an isolated
 CC template nucleic acid using polymerase enzyme and nucleosides selected
 CC for sequence specific reactivity and molecular weight and oligonucleotide
 CC primers; performing a cleavage reaction resulting in complete cleavage of

CC the transcript in a sequence-specific manner into fragments using cutters
 CC selected from the group consisting of enzymatic cutters, chemical
 CC cutters, and their combination; analyzing the cleavage reaction products
 CC to determine the molecular weights of the fragments; performing fragment
 CC identity mapping using nucleotide masses and cleavage specificities of
 CC the cutters to calculate the molecular weights and sequences of all
 CC possible fragments that result from the second step cleavage reactions;
 CC and comparing the masses observed in the third step with the fragment
 CC identity mapping, where the comparison results in determination of all
 CC the target sequences present in the sample. In determining a target
 CC sequence of a template nucleic acid, the steps are performed at least two
 CC times with different cutters, thus allowing production of overlapping
 CC fragments, and compiling the overlapping fragments to produce at least
 CC one larger subsequence. The larger subsequence is the complete sequence
 CC of the template. The primers are sequence specific and have a random
 CC sequence. The molecular weight is determined using mass spectroscopy
 CC which is matrix-assisted laser desorption/ionization time-of-flight
 CC spectroscopy. The method allows de novo detection of sequences in a
 CC target nucleic acid without requiring any prior sequence information.
 CC Also provided is a method for determining the number of genes in a
 CC nucleic acid sample. Sequences AED63145-AED63168 represent modified
 CC fragments produced during fragment identity mappings for
 CC 16/15(inv(alpha.alpha)):4 family.
 XX
 SQ Sequence 16 BP; 16 A; 0 C; 0 G; 0 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db 1 AAAAAAAAAAAAAA 16
 RESULT 1442
 AAX69800/C
 ID AAX69800 standard; RNA; 17 BP.
 XX
 AC AAX69800;
 XX
 DT 28-JUL-1999 (first entry)
 XX
 DE Human flt1 VEGF receptor hammerhead ribozyme substrate #1095.
 XX
 KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KW foetal liver kinase 1; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO9715662-A2.
 XX
 PD 01-MAY-1997.
 XX
 XX 25-OCT-1996; 96WO-US017480.
 XX
 PR 26-OCT-1995; 95US-0005974P.
 PR 11-JAN-1996; 96US-00584040.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (CHIR) CHIRON CORP.
 XX
 PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
 PI WPI; 1997-259017/23.
 DR
 XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.
 XX

PS Claim 4; Page 79; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention

XX Sequence 17 BP; 0 A; 1 C; 0 G; 0 T; 16 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
Db 17 AAAAAAAAAAAAAA 2

RESULT 1443

AAx69801/c
ID AAX69801 standard; RNA; 17 BP.

AC AAX69801;

XX 28-JUL-1999 (first entry)

DE Human flt1 VEGF receptor hammerhead ribozyme substrate #1096.

XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.

OS Homo sapiens.

PN WO9715662-A2.

XX 01-MAY-1997.

XX 25-OCT-1996; 96WO-US017480.

XX 26-OCT-1995; 95US-0005974P.

XX 11-JAN-1996; 96US-00584040.

XX (RIBO-) RIBOZYME PHARM INC.

PA (CHIR) CHIRON CORP.

PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.

XX Claim 4; Page 79; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples

CC of nucleic acid molecules from the present invention

XX Sequence 17 BP; 0 A; 1 C; 0 G; 0 T; 16 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1

RESULT 1444

AAV49503/c

ID AAV49503 standard; cDNA to mRNA; 17 BP.

XX AAV49503;

XX 18-NOV-1998 (first entry)

XX Human eosinophil cell activator HVC002 primer #1.

XX Eosinophil cell activator; treatment; diagnosis; malignant tumour;
KW parasitic infection; allergic inflammation; eosinophilic pneumonia;
KW rapid onset eosinophilia; autoimmune disease; gene therapy; primer; ss.

XX Synthetic.

XX Homo sapiens.

PN WO9824817-A1.

XX 11-JUN-1998.

XX 05-DEC-1997; 97WO-JP004470.

XX 05-DEC-1996; 96JP-00325762.

XX (KYOW) KYOWA HAKKO KOGYO KK.

XX Yoshisue H, Saito A, Nakagawa S, Kuga T, Shinkai A, Koike M;

PI Nishi T;

XX WPI; 1998-333261/29.

XX DNA and encoded protein which activates eosinophil cells - for treatment
PT of cancer, parasite infection, autoimmune disease and allergic
PT inflammation.

XX Example 1; Page 64; 92pp; Japanese.

XX AAV49503-V49507 are primers used in the isolation of a human eosinophil
CC cell activator. This protein and antibodies generated from the protein
CC can be used for treatment and diagnosis of malignant tumours, parasitic
CC infections, allergic inflammation, eosinophilic pneumonia, rapid onset
CC eosinophilia, and autoimmune diseases. DNA can be used for diagnosis, and
CC the antisense DNA in gene therapy of these disorders. The protein can be
CC used for screening of potential agonists or antagonists of its activity

XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAA 2723
Db 17 TAAAAAAAAAAAAA 2

RESULT 1445

AAx18371/c

ID AAX18371 standard; DNA; 17 BP.

```

XX AC AAX18371;
XX DT 11-MAY-1999 (first entry)
XX DE RT-PCR primer of the invention SEQ ID 12.
XX KW RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
XX OS Synthetic.
XX PN JPI1032765-A.
XX PD 09-FEB-1999.
XX PF 18-JUL-1997; 97JP-00208312.
XX PR 18-JUL-1997; 97JP-00208312.
XX PA (TAKI ) TAKARA SHUZO CO LTD.
XX DR WPI; 1999-183822/16.
XX PT Peptides having at least two new nucleotides - useful as primers in RT-PCR.
XX PS Disclosure; Page 11; 19pp; Japanese.
XX CC This sequence represents a primer of the invention. The invention relates to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n = natural number indicating the repetition of alpha; beta, delta = V or N; V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or thymine; gamma = thymine; k = natural number of 3 or over indicating the repetition of gamma, in which thymine expressed by gamma is composed of 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are useful as primers for RT-PCR and determination of base sequences. The new sequences allow for reproductive and highly efficient analysis of gene sequences
XX SQ Sequence 17 BP; 1 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2708 TAAAAAAAAAAAAAAAAA 2723
Db 16 TAAAAAAAAAAAAAAAAA 1
RESULT 1446
AAX18370/C
ID AAX18370 standard; DNA; 17 BP.
XX AC AAX18370;
XX DT 11-MAY-1999 (first entry)
XX DE RT-PCR primer of the invention SEQ ID 11.
XX KW RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
XX OS Synthetic.
XX PN JPI1032765-A.
XX PD 09-FEB-1999.
XX PF 18-JUL-1997; 97JP-00208312.
XX PR 18-JUL-1997; 97JP-00208312.

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XX PA (TAKI ) TAKARA SHUZO CO LTD.
XX DR WPI; 1999-183822/16.
XX PT Peptides having at least two new nucleotides - useful as primers in RT-PCR.
XX PS Disclosure; Page 11; 19pp; Japanese.
XX CC This sequence represents a primer of the invention. The invention relates to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n = natural number indicating the repetition of alpha; beta, delta = V or N; V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or thymine; gamma = thymine; k = natural number of 3 or over indicating the repetition of gamma, in which thymine expressed by gamma is composed of 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are useful as primers for RT-PCR and determination of base sequences. The new sequences allow for reproductive and highly efficient analysis of gene sequences
XX SQ Sequence 17 BP; 2 A; 0 C; 0 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 2708 TAAAAAAAAAAAAAAAAA 2723
Db 16 TAAAAAAAAAAAAAAAAA 1
RESULT 1447
AAX30179/C
ID AAX30179 standard; DNA; 17 BP.
XX AC AAX30179;
XX DT 16-AUG-2000 (first entry)
XX DE PCR primer GT15A used in pollenosis associated gene identification.
XX KW Pollenosis-associated protein; high pollen-specific immunoglobulin E; IGE; diagnose; cedar pollenosis; treatment; human; PCR primer; ss.
XX OS Synthetic.
XX PN WO200020575-A1.
XX PD 13-APR-2000.
XX PF 06-OCT-1999; 99WO-JP005506.
XX PR 06-OCT-1998; 98JP-00284610.
XX PA (GENO-) GENOX RES INC.
XX PI Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S; Obayashi I, Imai Y, Lu N, Ogawa K;
XX DR WPI; 2000-317712/27.
XX PT Gene highly expressed in patients with high cedar pollen-specific IGE levels, useful for diagnosing pollenosis, and screening candidate compounds for pollenosis treatment.
XX PS Example 6; Page 38; 44pp; Japanese.
XX CC This sequence represents a PCR primer used in the identification of a human pollenosis associated gene. The gene is highly expressed in individuals with high pollen-specific immunoglobulin E (IGE) levels. The

```

CC invention relates to the nucleotide sequence encoding the pollenosis
 CC associated protein, diagnosing pollenosis and screening candidate
 CC compounds for treating pollenosis. The gene can be used in diagnosing
 CC pollenosis, particularly cedar pollenosis, and screening candidate
 CC compounds for pollenosis treatment

XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAA 2723
 |||||
 Db 17 TAAAAAAAAAAAAA 2

RESULT 1448

AAX82720/C

ID AAX82720 standard; DNA; 17 BP.

XX

AC AAX82720;

XX

DT 10-NOV-2000 (first entry)

XX

DE Human IGA nephropathy-associated cDNA primer #61.

XX

KW IGA nephropathy-associated protein; diagnosis; treatment; antisense;
 human; primer; ss.

XX

OS Homo sapiens.

XX

PN W09963085-A1.

XX

PD 09-DEC-1999.

XX

PF 28-MAY-1999; 99WO-JP002855.

XX

PR 02-JUN-1998; 98JP-00152603.

XX

PA (KYOW) KYOWA HAKKO KOGYO KK.

XX

PI Ishiwata T, Sakurada M, Kawabata A, Nakagawa S, Nishi T, Kuga T;
 PI Sawada S, Takei M, Shibata K, Furuya A;

XX

DR WPI; 2000-097328/08.

XX

PT DNA sequences preferentially expressed in IGA nephropathy patients,
 PT proteins encoded by them, and antibodies to those proteins.

XX

PS Claim 3; Page 169; 180pp; Japanese.

XX

CC This invention describes novel DNA sequences preferentially expressed in
 CC IGA nephropathy patients, and DNA sequences stringently hybridizing to
 CC them. Independent claims cover diagnostic reagents for IGA nephropathy
 CC using the antisense sequences; the treatment of IGA nephropathy
 CC with IGA nephropathy, containing sequences encoded by the DNA sequences;
 CC antibodies recognizing these proteins; the production of the proteins by
 CC culture of host cells transformed with DNA encoding them; diagnostic
 CC reagents for IGA nephropathy containing the antibodies; and compositions
 CC for the treatment of IGA nephropathy which contain the antibodies. The
 CC products of the invention can be used for the diagnosis and treatment of
 CC IGA nephropathy. This sequence represents a primer used in the isolation
 CC and identification of the human IGA nephropathy-associated proteins
 CC described in the method of the invention

XX

SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAA 2723
 |||||
 Db 17 TAAAAAAAAAAAAA 2

RESULT 1449

AAX36739/C

ID AAX36739 standard; DNA; 17 BP.

XX

AC AAX36739;

XX

DT 13-MAR-2000 (first entry)

XX

DE Anchored oligo(dT) primer AT15A used for modified differential display.

XX

KW Stimulus-regulated nucleic acid; sequence profile; nucleic acid level;
 KW differentially expressed nucleic acid; disease state; cancer;
 KW autoimmune disease; infectious disease; aging; developmental disorder;
 KW proliferative disorder; neurological disorder; toxicity; primer;
 KW treatment resistance; differential expression; drug discovery;
 KW growth factor; epidermal growth factor; radiation; stress; pathogen; ss.

XX

OS Synthetic.

XX

PN W09955913-A2.

XX

PD 04-NOV-1999.

XX

PF 27-APR-1999; 99WO-US009119.

XX

PR 27-APR-1998; 98US-0083331P.

XX

PR 27-AUG-1998; 98US-0098070P.

XX

PR 04-FEB-1999; 99US-0118624P.

XX

PA (KIMW-) KIMMEL CANCER CENT SIDNEY.

XX

PI McClelland M, Welsh J, Trenkle T;

XX

DR WPI; 2000-086388/07.

XX

PT Measuring expression of low abundance reduced complexity target nucleic

XX

PS acid molecules.

XX

Example 3; Page 91; 187pp; English.

XX

CC AAX36739-41 represent oligo(dT) primers used for modified differential
 CC display, in the method of the invention. The specification describes a
 CC method for measuring the level of two or more nucleic acid molecules in a
 CC target. The method comprises contacting a probe with an arbitrarily or
 CC statistically sampled target and detecting the amount of specific binding
 CC of the target to the probe. The methods can be used to identify
 CC differentially expressed nucleic acid molecules associated with disease
 CC states, such as cancer, autoimmune disease, infectious disease, aging,
 CC developmental disorder, proliferative disorder or neurological disorder.
 CC Alternatively the methods can be used to assess the efficacy or toxicity
 CC of or a resistance to a treatment. Also the methods can be used to
 CC determine differential expression of nucleic acid molecules in response
 CC to a stimulus, e.g. a chemical, drug or growth factor (especially
 CC epidermal growth factor), radiation, stress or a pathogen. The methods
 CC can also be used to determine co-regulated genes that can be potential
 CC targets for drug discovery

XX

SQ Sequence 17 BP; 2 A; 0 C; 0 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAA 2723
 |||||
 Db 17 TAAAAAAAAAAAAA 2

```

RESULT 1450
AAA25449/c
ID AAA25449 standard; DNA; 17 BP.
XX
AC
XX
AC AAA25449;
XX
AC
XX
DT 19-JUL-2000 (first entry)
XX
DE
XX
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1947.
XX
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW gene expression modification; cancer; phosphorothioate; endonuclease;
KW anticancer; breast cancer; endometrium cancer; ss.
XX
OS Homo sapiens.
XX
PN WO9954459-A2.
XX
PN
XX
PD 28-OCT-1999.
XX
PD
XX
PF 19-APR-1999; 99WO-US008547.
XX
PF
XX
PR 20-APR-1998; 98US-0082404P.
XX
PR
XX
PR 23-JUN-1998; 98US-00103636.
XX
PR
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Thompson JD, Beigelman L, McSwiggen JA, Karpeisky A, Bellon L;
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;
PI Matulic-Adamic J;
XX
DR WPI; 2000-013248/01.
XX
XX
XX New nucleic acids that interact, and optionally cleave, target sequences,
XX used to treat cancer.
XX
PS Claim 77; Page 79; 149pp; English.
XX
XX
CC The present invention describes nucleic acids (A) that interact stably
CC with a target sequence and contain at least one phosphoro(di)thioate
CC link, having endonuclease activity. (A), and more generally any catalytic
CC nucleic acid (A') that modulates expression of the oestrogen receptor
CC gene, are used to treat cancer (particularly of breast or endometrium),
CC in vivo or by transforming cells ex vivo and implanting treated cells, or
CC for other conditions associated with levels of oestrogen receptor.
CC Because of the high selectivity for targeted RNA, (A) can also be used to
CC correlate inhibition of gene expression with alterations in phenotype,
CC particularly for identification of therapeutic targets, and as research
CC reagents (for RNA, in the same way that restriction endonucleases are
CC used with DNA). The combination of modifications in (A) improves
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC AAA24748 represent oestrogen receptor hammerhead ribozyme sequences, and
CC AAA25993 to AAA26105 represent their corresponding target sequences.
CC AAA24748 to AAA25992 represent their corresponding target sequences, and
CC AAA26107 to AAA26218 represent their corresponding target
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC antisense oligonucleotides used in the exemplification of the present
CC invention
XX
SQ Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
Db 17 AAAAAAAAAAAAAA 2

RESULT 1451
AAA25451/c

```

```

ID
XX
AC AAA25451;
XX
DT 19-JUL-2000 (first entry)
XX
DE
XX
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1949.
XX
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW gene expression modification; cancer; phosphorothioate; endonuclease;
KW anticancer; breast cancer; endometrium cancer; ss.
XX
OS Homo sapiens.
XX
PN WO9954459-A2.
XX
PN
XX
PD 28-OCT-1999.
XX
PD
XX
PF 19-APR-1999; 99WO-US008547.
XX
PF
XX
PR 20-APR-1998; 98US-0082404P.
XX
PR
XX
PR 23-JUN-1998; 98US-00103636.
XX
PR
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Thompson JD, Beigelman L, McSwiggen JA, Karpeisky A, Bellon L;
PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;
PI Matulic-Adamic J;
XX
DR WPI; 2000-013248/01.
XX
XX
XX New nucleic acids that interact, and optionally cleave, target sequences,
XX used to treat cancer.
XX
PS Claim 77; Page 79; 149pp; English.
XX
XX
CC The present invention describes nucleic acids (A) that interact stably
CC with a target sequence and contain at least one phosphoro(di)thioate
CC link, having endonuclease activity. (A), and more generally any catalytic
CC nucleic acid (A') that modulates expression of the oestrogen receptor
CC gene, are used to treat cancer (particularly of breast or endometrium),
CC in vivo or by transforming cells ex vivo and implanting treated cells, or
CC for other conditions associated with levels of oestrogen receptor.
CC Because of the high selectivity for targeted RNA, (A) can also be used to
CC correlate inhibition of gene expression with alterations in phenotype,
CC particularly for identification of therapeutic targets, and as research
CC reagents (for RNA, in the same way that restriction endonucleases are
CC used with DNA). The combination of modifications in (A) improves
CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
CC AAA24748 represent oestrogen receptor hammerhead ribozyme sequences, and
CC AAA25993 to AAA26105 represent their corresponding target sequences.
CC AAA24748 to AAA25992 represent their corresponding target sequences, and
CC AAA26107 to AAA26218 represent their corresponding target
CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
CC antisense oligonucleotides used in the exemplification of the present
CC invention
XX
SQ Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1

RESULT 1452
AAC64202/c
ID AAC64202 standard; DNA; 17 BP.
XX

```

```

AC AAC64202;
XX
XX 21-FEB-2001 (first entry)
XX
XX PCR anchor primer, SEQ ID NO:3, used in human gene 373 isolation.
XX
XX Human; pollinosis-associated gene 373; IgE; immunoglobulin E;
XX cedar pollen allergy; T-cell; reduced expression; detection; diagnosis;
XX drug screening; allergic disease; PCR primer; ss.
XX
XX Synthetic.
XX
XX WO200065046-A1.
XX
XX 02-NOV-2000.
XX
XX 26-APR-2000; 2000WO-JP002730.
XX
XX 27-APR-1999; 99JP-00120489.
XX
XX (GENO-) GENOX RES INC.
XX
XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
XX Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K;
XX WPI; 2000-687339/67.
XX
XX Pollinosis-associated gene 373 undergoing significantly low expression in
XX subjects with high cedar pollen-specific immunoglobulin-E levels, useful
XX in diagnosis of allergic diseases and screening drug candidates.
XX
XX Example 6; Page 69; 80pp; Japanese.
XX
XX The invention relates to the human pollinosis-associated gene 373 which
XX exhibits significantly reduced expression in the T-cells of individuals
XX with high cedar pollen-specific IgE (immunoglobulin E) levels. The gene
XX was isolated from T-cells from individuals allergic to cedar pollen using
XX the differential display method. The invention also relates also relates
XX to the protein encoded by pollinosis gene 373; expression constructs and
XX host cells comprising pollinosis-associated gene 373 nucleic acids;
XX pollinosis-associated gene 373 primers and probes; antibodies against the
XX protein encoded by the gene; methods of detection of pollinosis-
XX associated gene 373 nucleic acids; and a method of diagnosis of allergic
XX diseases via the detection of pollinosis-associated gene 373 nucleic
XX acids. The invention additionally encompasses methods of screening drug
XX candidates for the treatment of allergic disease by measuring the
XX expression of pollinosis-associated gene 373 in pollen antigen-stimulated
XX T-cells in the presence of a test compound relative to a control.
XX Pollinosis-associated gene 373 is useful in the diagnosis of allergic
XX diseases and in the screening of drug candidates for the treatment of
XX such diseases. The present sequence represents a PCR primer used in the
XX isolation of human pollinosis-associated gene 373 cDNA
XX
XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 16; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAA 2723
XX |||||||
XX Db 17 TAAAAAATAAAAA 2
XX
XX RESULT 1453
XX AAC64181/C
XX ID AAC64181 standard; DNA; 17 BP.
XX
XX AAC64181;
XX
XX 21-FEB-2001 (first entry)
XX
XX PCR anchor primer, SEQ ID NO:2, used in human gene 419 isolation.
XX

```

```

XX
XX Human; pollinosis-associated gene 419; FAF-1 homologue;
XX Fas-associated factor-1; IgE; immunoglobulin E; cedar pollen allergy;
XX T-cell; reduced expression; detection; diagnosis; drug screening;
XX allergic disease; PCR primer; ss.
XX
XX Synthetic.
XX
XX WO200065045-A1.
XX
XX 02-NOV-2000.
XX
XX 26-APR-2000; 2000WO-JP002729.
XX
XX 27-APR-1999; 99JP-00120490.
XX
XX (GENO-) GENOX RES INC.
XX
XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
XX Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K;
XX WPI; 2000-687338/67.
XX
XX Pollinosis-associated gene 419 undergoing significantly low expression in
XX subjects with high cedar pollen-specific IgE levels, useful in diagnosis
XX of allergic diseases and screening drug candidates.
XX
XX Example 6; Page 49; 77pp; Japanese.
XX
XX The invention relates to the human pollinosis-associated gene 419 which
XX exhibits reduced expression in the T-cells of individuals with high cedar
XX pollen-specific IgE (immunoglobulin E) levels. The gene was isolated from
XX T-cells from individuals allergic to cedar pollen using the differential
XX display method. Pollinosis-associated gene 419 has homology with the gene
XX encoding human Fas-associated factor-1 (FAP-1). The invention also
XX relates to the protein encoded by pollinosis gene 419; expression
XX constructs and host cells comprising pollinosis-associated gene 419
XX nucleic acids; pollinosis-associated gene 419 primers and probes;
XX antibodies against the protein encoded by the gene; methods of detection
XX of pollinosis-associated gene 419 nucleic acids; and a method of
XX diagnosis of allergic diseases via the detection of pollinosis-
XX associated gene 419 nucleic acids. The invention additionally encompasses
XX methods of screening drug candidates for the treatment of allergic
XX disease by measuring the expression of pollinosis-associated gene 419 in
XX pollen antigen-stimulated T-cells in the presence of a test compound
XX relative to a control. Pollinosis-associated gene 419 is useful in the
XX diagnosis of allergic diseases and in the screening of drug candidates
XX for the treatment of such diseases. The present sequence represents a PCR
XX primer used in the isolation of human pollinosis-associated gene 419 cDNA
XX
XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
XX
XX Query Match 0.6%; Score 16; DB 1; Length 17;
XX Best Local Similarity 100.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 2708 TAAAAAATAAAAA 2723
XX |||||||
XX Db 17 TAAAAAATAAAAA 2
XX
XX RESULT 1454
XX AAC64171/C
XX ID AAC64171 standard; DNA; 17 BP.
XX
XX AAC64171;
XX
XX 21-FEB-2001 (first entry)
XX
XX PCR anchor primer, SEQ ID NO:2, used in human gene 513 isolation.
XX
XX Human; pollinosis-associated gene 513; IgE; immunoglobulin E;
XX cedar pollen allergy; T-cell; reduced expression; detection; diagnosis;
XX

```

KW drug screening; allergic disease; PCR primer; ss.

OS Synthetic.

XX WO200065049-A1.

PN 02-NOV-2000.

PD 26-APR-2000; 2000WO-JP002733.

XX 27-APR-1999; 99JP-00120491.

PA (GENO-) GENOX RES INC.

XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K;

XX WPI; 2000-687342/67.

XX Pollinosis-associated gene 513 undergoing significantly low expression in
PT subjects with high cedar pollen-specific IgE levels, useful in diagnosis
PT of allergic diseases and screening drug candidates.

XX Example 6; Page 38; 46pp; Japanese.

XX The invention relates to the human pollinosis-associated gene 513 which
CC exhibits significantly reduced expression in the T-cells of individuals
CC with high cedar pollen-specific IgE (immunoglobulin E) levels. The gene
CC was isolated from T-cells from individuals allergic to cedar pollen using
CC the differential display method. The invention also relates to methods of
CC detection of pollinosis-associated gene 513 nucleic acids; a method of
CC diagnosis of allergic diseases via the detection of pollinosis-associated
CC gene 513 nucleic acids; and methods of screening drug candidates for the
CC treatment of allergic disease by measuring the expression of pollinosis-
CC associated gene 513 in pollen antigen-stimulated T-cells in the presence
CC of a test compound relative to a control. Pollinosis-associated gene 513
CC is useful in the diagnosis of allergic diseases and in the screening of
CC drug candidates for the treatment of such diseases. The present sequence
CC represents a PCR primer used in the isolation of human pollinosis-
CC associated gene 513 cDNA

SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAA 2723

Db 17 TAAAAAAAAAAAAAAAAA 2

RESULT 1455

AAC64161/c

ID AAC64161 standard; DNA; 17 BP.

XX AAC64161;

XX 21-FEB-2001 (first entry)

XX PCR anchor primer, SEQ ID NO:2, used in human gene 581 isolation.

XX Human; pollinosis-associated gene 581; IgE; immunoglobulin E;
KW cedar pollen allergy; T-cell; reduced expression; detection; diagnosis;
KW drug screening; allergic disease; PCR primer; ss.

OS Synthetic.

XX WO200065048-A1.

PN 02-NOV-2000.

XX 26-APR-2000; 2000WO-JP002732.

XX

PR 27-APR-1999; 99JP-00120492.

XX (GENO-) GENOX RES INC.

XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K;

XX WPI; 2000-687341/67.

XX Pollenosis-associated gene 581 undergoing significantly low expression in
PT subjects with high cedar pollen-specific IgE levels, useful in diagnosis
PT of allergic diseases and screening drug candidates.

XX Example 6; Page 39; 69pp; Japanese.

XX The invention relates to the human pollinosis-associated gene 581 which
CC exhibits significantly reduced expression in the T-cells of individuals
CC with high cedar pollen-specific IgE (immunoglobulin E) levels. The gene
CC was isolated from T-cells from individuals allergic to cedar pollen using
CC the differential display method. The invention also relates also relates
CC to the protein encoded by pollinosis-associated gene 581; to expression
CC constructs and host cells comprising pollinosis-associated gene 581
CC nucleic acids; pollinosis-associated gene 581 primers and probes;
CC antibodies against the protein encoded by the gene; methods of detection
CC of pollinosis-associated gene 581 nucleic acids; and a method of
CC diagnosis of allergic diseases via the detection of pollinosis-associated
CC gene 581 nucleic acids. The invention additionally encompasses methods of
CC screening drug candidates for the treatment of allergic disease by
CC measuring the expression of pollinosis-associated gene 581 in pollen
CC antigen-stimulated T-cells in the presence of a test compound relative to
CC a control. Pollinosis-associated gene 581 is useful in the diagnosis of
CC allergic diseases and in the screening of drug candidates for the
CC treatment of such diseases. The present sequence represents a PCR primer
CC used in the isolation of human pollinosis-associated gene 581 cDNA

SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAAAAAA 2723

Db 17 TAAAAAAAAAAAAAAAAA 2

RESULT 1456

AAC64213/c

ID AAC64213 standard; DNA; 17 BP.

XX AAC64213;

XX 21-FEB-2001 (first entry)

XX PCR anchor primer, SEQ ID NO:2, used in human gene 627 isolation.

XX Human; pollinosis-associated gene 627; IgE; immunoglobulin E;
KW cedar pollen allergy; T-cell; reduced expression; detection; diagnosis;
KW drug screening; allergic disease; PCR primer; ss.

OS Synthetic.

XX WO200065051-A1.

PN 02-NOV-2000.

XX 26-APR-2000; 2000WO-JP002735.

XX 27-APR-1999; 99JP-00120493.

XX (GENO-) GENOX RES INC.

XX

PI Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
 PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K;
 XX WPI; 2000-687344/67.
 DR
 XX Pollinosis-associated gene 627 undergoing significantly low expression in
 PT subjects with high cedar pollen-specific IgE levels, useful in diagnosis
 PT of allergic diseases and screening drug candidates.
 XX
 XX Example 6; Page 41; Sipp; Japanese.
 PS
 XX The invention relates to the human pollinosis-associated gene 627 which
 CC exhibits significantly reduced expression in the T-cells of individuals
 CC with high cedar pollen-specific IgE (immunoglobulin E) levels. The gene
 CC was isolated from T-cells from individuals allergic to cedar pollen using
 CC the differential display method. The invention also relates to methods of
 CC detection of pollinosis-associated gene 627 nucleic acids; a method of
 CC diagnosis of allergic diseases via the detection of pollinosis-associated
 CC gene 627 nucleic acids; and a method of screening drug candidates for the
 CC treatment of allergic disease by measuring the expression of pollinosis-
 CC associated gene 627 in pollen antigen-stimulated T-cells in the presence
 CC of a test compound relative to a control. Pollinosis-associated gene 627
 CC is useful in the diagnosis of allergic diseases and in the screening of
 CC drug candidates for the treatment of such diseases. The present sequence
 CC represents a PCR primer used in the isolation of human pollinosis-
 CC associated gene 627 cDNA
 XX
 XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAA 2723
 Db 17 TAAAAAATAAAAAA 2
 RESULT 1457
 AAC64230/c
 ID AAC64230 standard; DNA; 17 BP.
 XX
 AC AAC64230;
 XX
 XX 21-FEB-2001 (first entry)
 DT
 DE PCR anchor primer, SEQ ID NO:2, used in human gene 795 isolation.
 DE
 XX Human; pollinosis-associated gene 795; vimentin homologue; IgE;
 KW immunoglobulin E; cedar pollen allergy; T-cell; reduced expression;
 KW detection; diagnosis; drug screening; allergic disease; PCR primer; ss.
 XX
 OS Synthetic.
 OS
 XX WO200065050-A1.
 PN
 XX 02-NOV-2000.
 PD
 XX 26-APR-2000; 2000WO-JP002734.
 PF
 XX 27-APR-1999; 99JP-00120494.
 PR
 XX (GENO-) GENOX RES INC.
 PA (EISA) EISAI CO LTD.
 PA
 XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
 PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K, Takahashi E;
 PI Yokoi A;
 XX WPI; 2000-687343/67.
 DR
 XX Pollinosis-associated gene 795 undergoing significantly low expression in
 PT subjects with high cedar pollen-specific IgE levels, useful in diagnosis
 PT of allergic diseases and screening drug candidates.
 XX

PT of allergic diseases and screening drug candidates.
 XX
 PS Page 45; Example 6; 73pp; Japanese.
 XX
 CC The invention relates to the human pollinosis-associated gene 795 which
 CC exhibits significantly reduced expression in the T-cells of individuals
 CC with high cedar pollen-specific IgE (immunoglobulin E) levels. The gene
 CC was isolated from T-cells from individuals allergic to cedar pollen using
 CC the differential display method. Pollinosis-associated gene 795 has
 CC homology with the human vimentin gene. The invention also relates also
 CC relates to the protein encoded by pollinosis gene 795; to expression
 CC constructs and host cells comprising pollinosis-associated gene 795
 CC nucleic acids; pollinosis-associated gene 795 primers and probes;
 CC antibodies against the protein encoded by the gene; methods of detection
 CC of pollinosis-associated gene 795 nucleic acids; and a method of
 CC diagnosis of allergic diseases via the detection of pollinosis-associated
 CC gene 795 nucleic acids. The invention additionally encompasses methods of
 CC screening drug candidates for the treatment of allergic disease by
 CC measuring the expression of pollinosis-associated gene 795 in pollen
 CC antigen-stimulated T-cells in the presence of a test compound relative to
 CC a control. Pollinosis-associated gene 795 is useful in the diagnosis of
 CC allergic diseases and in the screening of drug candidates for the
 CC treatment of such diseases. The present sequence represents a PCR primer
 CC used in the isolation of human pollinosis-associated gene 795 cDNA
 XX
 XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAATAAAAAA 2723
 Db 17 TAAAAAATAAAAAA 2
 RESULT 1458
 AAC92292/c
 ID AAC92292 standard; DNA; 17 BP.
 XX
 AC AAC92292;
 XX
 XX 22-MAR-2001 (first entry)
 DT
 DE Human pollinosis-associated gene 465 related PCR primer SEQ ID NO:2.
 DE
 XX Human; pollinosis-associated gene 465; pollen scattering; allergy;
 KW allergic disease; PCR primer; ss.
 KW
 XX Homo sapiens.
 OS
 XX WO200073439-A1.
 PN
 XX 07-DEC-2000.
 PD
 XX 18-MAY-2000; 2000WO-JP003191.
 PF
 XX 27-MAY-1999; 99JP-00148784.
 PR
 XX (GENO-) GENOX RES INC.
 PA (EISA) EISAI CO LTD.
 PA
 XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
 PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K, Takahashi E;
 PI Yokoi A;
 XX WPI; 2001-061528/07.
 DR
 XX Pollinosis-associated gene 465 undergoing significantly low expression in
 PT subjects after pollen scattering, useful in diagnosis of allergic
 PT diseases and screening candidate compounds to regulate response of T
 PT cells to antigen stimulus.
 XX

PS Example 6; Page 43; 61pp; Japanese.

CC The present invention describes the human pollinosis-associated gene 465
 CC which has a nucleic acid sequence of 3442 base pairs (bp), given in
 CC (AAC92291), that undergoes significantly low expression in subjects after
 CC pollen scattering, and is useful in the diagnosis of allergic diseases
 CC and screening candidate compounds for remedies capable of regulating the
 CC response of T cells to the stimulus by an antigen. The gene is useful in
 CC the diagnosis of allergic diseases and screening candidate compounds for
 CC remedies capable of regulating the response of T cells to the stimulus by
 CC an antigen. The present sequence represents a PCR primer which is used in
 CC an example from the present invention

XX
 SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAA 2723
 |||||
 Db 17 TAAAAAAAAAAAAA 2

RESULT 1459
 AAC91719/c
 ID AAC91719 standard; DNA; 17 BP.
 XX
 AC AAC91719;
 XX
 DT 27-MAR-2001 (first entry)
 XX
 DE PCR anchor primer, SEQ ID NO:2, used in human gene 787 isolation.
 XX
 DE Human; pollinosis-associated gene 787; pollen allergy; T-cell;
 KW reduced expression; detection; diagnosis; drug screening;
 KW allergic disease; PCR primer; ss.
 XX
 OS Synthetic.
 XX
 XX WO200073440-A1.
 PN
 XX 07-DEC-2000.
 PD
 XX 18-MAY-2000; 2000WO-JP003192.
 PF
 XX 27-MAY-1999; 99JP-00148785.
 PR
 XX (GENO-) GENOX RES INC.
 PA
 PA (EISA) EISAI CO LTD.
 XX
 XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
 PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K, Takahashi E;
 PI Yokoi A;
 XX
 DR WPI; 2001-032159/04.
 XX
 XX Pollinosis-associated gene 787 undergoing significantly low expression in
 PT subjects after pollen scattering, useful in diagnosis of allergic
 PT diseases and screening candidate compounds to regulate response of T
 PT cells to antigen stimulus.

XX
 PS Example 6; Page 40; 54pp; Japanese.

CC The invention relates to the human pollinosis-associated gene 787 which
 CC exhibits significantly reduced expression in the T-cells of individuals
 CC after the pollen-scattering season, relative to expression levels in T-
 CC cells before the pollen-scattering season. The gene was isolated from T-
 CC cells from individuals allergic to pollen using the differential display
 CC method. The invention also relates to pollinosis-associated gene 787
 CC primers and probes; methods of detection of pollinosis-associated gene
 CC 787 nucleic acids; and a method of diagnosis of allergic diseases via the
 CC detection of pollinosis-associated gene 787 nucleic acids. The invention

CC additionally encompasses a method of screening drug candidates for the
 CC treatment of allergic disease by measuring the expression of pollinosis-
 CC associated gene 787 in pollen antigen-stimulated T-cells in the presence
 CC of a test compound relative to a control. Pollinosis-associated gene 787
 CC is useful in the diagnosis of allergic diseases and in the screening of
 CC drug candidates for the treatment of such diseases. The present sequence
 CC represents a PCR primer used in the isolation of human pollinosis-
 CC associated gene 787 cDNA

XX
 SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAA 2723
 |||||
 Db 17 TAAAAAAAAAAAAA 2

RESULT 1460
 AAC82874/c
 ID AAC82874 standard; DNA; 17 BP.
 XX
 AC AAC82874;
 XX
 DT 20-MAR-2001 (first entry)
 XX
 DE Human pollinosis-associated gene 441 primer #1.
 XX
 KW Pollinosis; pollinosis-associated gene 441; allergy; T cell;
 KW pollen scattering; antigen; primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200073435-A1.
 PN
 XX 07-DEC-2000.
 PD
 XX 18-MAY-2000; 2000WO-JP003190.
 PF
 XX 27-MAY-1999; 99JP-00148783.
 PR
 XX (GENO-) GENOX RES INC.
 PA
 XX Nagasu T, Sugita Y, Kashiwabara T, Oshida T, Obayashi M, Gunji S;
 PI Obayashi I, Imai Y, Yoshida N, Ogawa K, Matsui K,
 XX WPI; 2001-061526/07.
 DR
 XX Pollinosis-associated gene 441 which undergoes lower expression in
 PT subjects after pollen scattering, useful in diagnosis of allergic
 PT diseases and screening candidate compounds to regulate response of T
 PT cells to antigen stimulus.

XX
 PS Example 6; Page 35; 42pp; Japanese.

CC This invention describes a novel nucleic acid molecule comprising a
 CC sequence (I) which undergoes significantly low expression in subjects
 CC after pollen scattering, and is useful in diagnosis of allergic diseases
 CC and screening candidate compounds for remedies capable of regulating the
 CC response of T cells to the stimulus by an antigen

XX
 SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAA 2723
 |||||
 Db 17 TAAAAAAAAAAAAA 2

```

RESULT 1461
AAH47126/C
ID AAH47126 standard; DNA; 17 BP.
XX
XX AAH47126;
AC
XX
XX 30-NOV-2001 (first entry)
DT
XX
XX Nucleotide sequence of primer GT15A.
DE
XX
XX B1001; B1466; B1072; B1151; T-cell; allergy; atopic dermatitis; human;
KW PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200165259-A1.
PN
XX
XX 07-SEP-2001.
PD
XX
XX 23-FEB-2001; 2001WO-JP001372.
PF
XX
XX 02-MAR-2000; 2000JP-00061832.
PR
XX
XX (GENO-) GENOX RES INC.
PA
XX (NICE-) JAPAN GEN NAT CHILDREN'S HOSPITAL.
PA
XX Nagasu T, Oshida T, Obayashi I, Matsui K, Saito H;
PI
XX WPI; 2001-557789/62.
PI
XX
XX Diagnosis of allergies including atopic dermatitis.
XX
XX Example 6; Page 65; 83pp; Japanese.
XX
XX The invention provides a method of diagnosis of allergies that involves:
CC assaying the levels of expression of genes B1001, B1466, B1072 or B1151
CC in T-cells; and comparing them with the level of expression in healthy T-
CC cells. The method is useful for diagnosing allergies, particularly atopic
CC dermatitis. The present sequence represents a PCR primer used for
CC analysis of the expression of the above genes
XX
XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
SQ

Query Match 0.8%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2723
Db 17 TAAAAAATAAAAAAAAAA 2

RESULT 1462
ABK13941/C
ID ABK13941 standard; DNA; 17 BP.
XX
XX ABK13941;
AC
XX
XX 21-MAY-2002 (first entry)
DT
XX
XX 5'-PCR primer used to produce single pattern characteristic by FokI.
DE
XX
XX Identification of transcribed gene; mRNA profile; gene expression;
KW cellular process; fingerprinting; susceptibility to external factor;
KW development; disease; PCR; primer; ss.
XX
XX Synthetic.
OS
XX WO200208461-A2.
XX
XX 31-JAN-2002.
XX
XX

Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAATAAAAAAAAAA 2724
Db 16 AAAAAAATAAAAAAAAAA 1

RESULT 1463
ABK49634/C
ID ABK49634 standard; DNA; 17 BP.
XX
XX ABK49634;
AC
XX
XX 15-JUL-2002 (first entry)
DT
XX
XX Human Acetyltransferase-like protein 20-90-05 PCR primer GT15A.
DE
XX
XX Human; ss; PCR; acetyltransferase; 20-90-05; allergic disease; primer;
KW differential display; eosinophil; antiallergic; atopic dermatitis; GT15A.
XX
XX Homo sapiens.
OS
XX
XX WO200224903-A1.
PN
XX
XX 28-MAR-2002.
PD
XX
XX 21-SEP-2001; 2001WO-JP008246.
PF
XX
XX 25-SEP-2000; 2000JP-00291318.
PR
XX
XX (GENO-) GENOX RES INC.
PA
XX (NICE-) JAPAN GEN NAT CHILDREN'S HOSPITAL.
PA
XX (EISA) EISAI CO LTD.
XX
XX Sugita Y, Hashida R, Ogawa K, Fujishima T, Nagasu T, Tsujimoto G;
PI Takahashi E;
PI

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PF 23-JUL-2001; 2001WO-IB001539.
XX
XX 21-JUL-2000; 2000GB-00018016.
PR 21-JUL-2000; 2000US-0219925P.
XX
XX (GLOB-) GLOBAL GENOMICS AB.
PA
XX Linnarsson S, Ernfors P, Bauren G;
XX
XX WPI; 2002-217065/27.
DR
XX
XX Providing mRNA profile, by generating two independent patterns
PT characteristic of sample mRNA population, analyzing patterns, comparing
PT gene expression by cell types under varied conditions, and identifying
PT genes.
XX
XX Disclosure; Fig 2; 67pp; English.
XX
XX The present invention relates to a method for providing a profile of mRNA
CC molecules present in a sample. The method comprises generating two
CC independent patterns characteristic of the population of mRNA molecules
CC expressed in the sample and analysing the patterns using a combinatorial
CC algorithm, comparing gene expression by different or same cell types
CC under different conditions, and identifying genes having a role in
CC various cellular processes. The method is useful for the analysis and
CC identification of transcribed genes, and fingerprinting. The method can
CC be used to identify genes which play a role in determining various
CC cellular processes, including susceptibility to external factors,
CC development, and disease. The present sequence for a PCR primer is used
CC in the production of a single pattern characteristic of a sample,
CC employing a Type IIS restriction enzyme (i.e. FokI) in the methods of the
CC present invention
XX
XX Sequence 17 BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
SQ

```

```

XX WPI; 2002-315738/35.
XX
PT Examining allergic diseases by differential display of gene showing
PT different expression particularly increased expression in remission stage
PT in eosinophils of patients, also applicable in screening candidate
PT compounds for remedies.
XX
PS Example 1; Page 56; 72pp; Japanese.
XX
CC The invention relates to a method for examining allergic diseases
CC comprises determining the expression level of a gene containing, the
CC human cDNA appearing as ABK49633 which has homology with
CC acetyltransferases in the eosinophils of a patient and comparing the
CC expression level with that in the eosinophils of a healthy individual
CC (i.e. differential display). Also included are methods of screening for
CC candidate compounds which affect the expression level of the gene or the
CC activity of the protein encoded by the gene (including related proteins
CC and mutants), the use of probes based on the gene sequence in the
CC examination of allergic diseases, the use of reporter constructs in the
CC screening of candidate compounds, a vector containing a the transcription
CC controlling region of the gene, cells transformed with the vector, an
CC antibody against the protein and a model animal for allergic diseases
CC which is a transgenic non-human vertebrate with lowering of expression
CC intensity of the gene in eosinophils. The method is examining allergic
CC diseases particularly atopic dermatitis which is also applicable in
CC screening candidate compounds for remedies. Such method can be performed
CC in high throughput, at low cost. The present sequence is a differential
CC display PCR primer for the cDNA encoding the human acetyltransferase-like
CC protein 20-90-05
XX
SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2723
Db 17 TAAAAAATAAAAAAAAAA 2

RESULT 1464
ABL59038/c
ID ABL59038 standard; DNA; 17 BP.
XX
AC ABL59038;
XX
DT 20-AUG-2002 (first entry)
XX
DE Nucleotide sequence of PCR primer GT15A.
XX
KW Human; allergosis; eosinophil; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN JP2002095500-A.
XX
PD 02-APR-2002.
XX
PF 25-SEP-2000; 2000JP-00291316.
XX
PR 25-SEP-2000; 2000JP-00291316.
XX
PA (GENO-) GENOX SOYAKU KENKYUSHO KK.
PA (KOKU-) KOKURITSU SHONI BYOIN INCHO.
XX
WPI; 2002-439993/47.
XX
PT Examining allergosis, involves measuring the expression levels of a
PT specific gene, and comparing it to the levels in the eosinophils of a
PT healthy control.
XX

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PS Example 1; Page 17; 20pp; Japanese.
XX
CC The specification describes a method for examining allergosis. The method
CC comprises measuring the expression level of the gene given in ABL59037,
CC and comparing it with the expression level of the gene in the eosinophils
CC of a healthy person. The method is used for the examination of
CC allergosis. The present sequence represents a PCR primer, which is used
CC in the course of the invention
XX
SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2723
Db 17 TAAAAAATAAAAAAAAAA 2

RESULT 1465
ABN99829/c
ID ABN99829 standard; DNA; 17 BP.
XX
AC ABN99829;
XX
DT 15-AUG-2002 (first entry)
XX
DE Human allergic disease related PCR primer SEQ ID NO: 18.
XX
KW Human; allergy; atopic dermatitis; eosinophil; anti-allergic; PCR;
KW primer; ss.
XX
OS Homo sapiens.
XX
PN WO200233069-A1.
XX
PD 25-APR-2002.
XX
PF 28-SEP-2001; 2001WO-JP008574.
XX
PR 13-OCT-2000; 2000JP-00314093.
XX
PA (GENO-) GENOX RES INC.
PA (NIGE-) JAPAN GEN NAT CHILDREN'S HOSPITAL.
XX
PI Sugita Y, Hashida R, Ogawa K, Obayashi M, Nagasu T, Saito H;
XX
WPI; 2002-372311/40.
XX
PT Method for examining allergic diseases by differential display of
PT seventeen genes showing different expression particularly significant
PT increase in eosinophils in patients with mild atopic dermatitis, also
PT applicable in screening compounds.
XX
PS Example 1; Page 109; 165pp; Japanese.
XX
CC The present invention relates to a method for examining allergic diseases
CC which involves determining the expression level of a gene, having one of
CC the 17 nucleotide sequences shown in ABN99812-ABN99828, in the
CC eosinophils in a patient and comparing the expression level with that in
CC the eosinophils of a healthy individual. The method can be used to
CC examine allergic diseases, particularly atopic dermatitis, and its early
CC diagnosis, which is also applicable in screening candidate compounds for
CC remedies. The present sequence is a PCR primer described in the
CC exemplification of the invention
XX
SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 2708 TAAAAAAAAAAAAA 2723
Db 17 TAAAAAAAAAAAAA 2

RESULT 1466
AAL49948/c
ID AAL49948 standard; DNA; 17 BP.
XX AC AAL49948;
XX DT 10-DEC-2002 (first entry)
XX DE Human B1153 expression in allergic disease related PCR primer GT15A.
XX KW Human; allergy; B1153; differential expression; antiallergic; asthma;
XX KW antiasthmatic; antiinflammatory; atopic skin inflammation; PCR; primer;
XX KW ss.
XX OS Unidentified.
XX PN WO200250269-A1.
XX PD 27-JUN-2002.
XX PF 21-DEC-2001; 2001WO-JP011286.
XX PR 21-DRC-2000; 2000JP-00389476.
XX PS (GENO-) GENOX RES INC.
XX PA (NIGE-) JAPAN GEN NAT CHILDREN'S HOSPITAL.
XX PI Matsumoto Y, Imai Y, Oshida T, Sugita Y, Nagasu T, Teujimoto G;
XX WPI; 2002-713252/77.
XX DR
XX PT Examination of allergic diseases comprises detecting gene B1153 over-
XX PT expressed in T cells of allergy patients for diagnosis treatment and
XX PT investigation of atopic skin inflammation and asthma.
XX PS Example 6; Page 81; 102pp; Japanese.
XX CC The present invention relates to a method of examining allergic diseases
XX CC which comprises comparing the expression level of gene B1153 in allergy
XX CC patients with the expression level in healthy subjects. The method is
XX CC useful for the treatment, prevention, diagnosis and study of allergic
XX CC diseases including atopic skin inflammation and asthma. The present
XX CC sequence is a PCR primer described in the exemplification of the
XX CC invention
XX SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAA 2723
Db 17 TAAAAAAAAAAAAA 2

RESULT 1467
AAL47234/c
ID AAL47234 standard; DNA; 17 BP.
XX AC AAL47234;
XX DT 22-AUG-2002 (first entry)
XX DE Allergic disease examination method related anchor primer SEQ ID NO: 2.
XX KW Allergic disease; allergy; antiallergic; interseectin 2; eosinophil;
XX KW atopic dermatitis; human; PCR; primer; ss.

QY 2708 TAAAAAAAAAAAAA 2723
Db 17 TAAAAAAAAAAAAA 2

RESULT 1468
ABK49756/c
ID ABK49756 standard; DNA; 17 BP.
XX AC ABK49756;
XX DT 15-JUL-2002 (first entry)
XX DE Human atopic dermatitis cDNA related PCR primer GT15a.
XX KW Atopic dermatitis; ss; differential display; primer; PCR; eosinophil;
XX KW allergic disease; antiallergic; dermatological; GT15a.
XX OS Synthetic.
XX PN WO200226962-A1.
XX PD 04-APR-2002.
XX PF 21-SEP-2001; 2001WO-JP008247.
XX PR 26-SEP-2000; 2000JP-00293021.
XX PS (GENO-) GENOX RES INC.
XX PA (NIGE-) JAPAN GEN NAT CHILDREN'S HOSPITAL.
XX
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XX OS Unidentified.
XX PN WO200233122-A1.
XX PD 25-APR-2002.
XX PF 11-OCT-2001; 2001WO-JP008937.
XX PR 13-OCT-2000; 2000JP-00314093.
XX PS (GENO-) GENOX RES INC.
XX PA (NIGE-) JAPAN GEN NAT CHILDREN'S HOSPITAL.
XX PI (EISA) EISAI CO LTD.
XX PI Sugita Y, Hashida R, Ogawa K, Obayashi M, Nagasu T, Saito H;
XX PI Takahashi E;
XX WPI; 2002-372313/40.
XX DR
XX PT Method for examining allergic diseases by differential display of
XX PT interseectin 2 gene showing different expression particularly significant
XX PT increase in eosinophils in patients.
XX PS Example 1; Page 52; 90pp; Japanese.
XX CC The present invention relates to a method for examining allergic diseases
XX CC with interseectin 2 gene or a gene with equivalent function of interseectin
XX CC 2 as an indicator gene, which comprises determining the expression level
XX CC of the gene in the eosinophils in a patient, and comparing the expression
XX CC level with that in the eosinophils of a healthy individual. The method is
XX CC for examining allergic diseases, particularly atopic dermatitis, which is
XX CC also applicable in screening candidate compounds for remedies. The
XX CC present sequence is an anchor primer described in the exemplification of
XX CC the invention
XX SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAA 2723
Db 17 TAAAAAAAAAAAAA 2

RESULT 1468
ABK49756/c
ID ABK49756 standard; DNA; 17 BP.
XX AC ABK49756;
XX DT 15-JUL-2002 (first entry)
XX DE Human atopic dermatitis cDNA related PCR primer GT15a.
XX KW Atopic dermatitis; ss; differential display; primer; PCR; eosinophil;
XX KW allergic disease; antiallergic; dermatological; GT15a.
XX OS Synthetic.
XX PN WO200226962-A1.
XX PD 04-APR-2002.
XX PF 21-SEP-2001; 2001WO-JP008247.
XX PR 26-SEP-2000; 2000JP-00293021.
XX PS (GENO-) GENOX RES INC.
XX PA (NIGE-) JAPAN GEN NAT CHILDREN'S HOSPITAL.
XX
```

PI Sugita Y, Hashida R, Ogawa K, Fujishima T, Nagasu T, Saito H;
 DR WPI; 2002-330097/36.
 XX
 PT Examining allergic diseases by differential display of genes showing
 PT different expression particularly increase in remission stage in
 PT eosinophils in patients.
 XX
 PS Example 1; Page 54; 74pp; Japanese.
 XX
 CC This invention relates to gene sequences that are differentially
 CC expressed in eosinophils from patients with atopic dermatitis in the
 CC increment stage as compared with those in the remission stage. These
 CC sequences are used in a novel method for examining allergic diseases
 CC comprising determining the expression levels of these genes and comparing
 CC the expression level with that in the eosinophils of a healthy
 CC individual. The method of the invention may have antiallergic or
 CC dermatological activities. The method can be used to diagnose allergic
 CC diseases particularly atopic dermatitis, and may also be used to screen
 CC candidate compounds for remedies. The method of the invention can be
 CC performed in high throughput, at low cost. The present sequence
 CC represents the G15a PCR primer used to amplify the differentially
 CC amplified atopic dermatitis related cDNA sequences of the invention
 XX
 SQ Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAAAAA 2723
 DB 17 TAAAAAAAAAAAAAAAAA 2
 RESULT 1469
 ADB04271/c
 ID ADB04271 standard; DNA; 17 BP.
 XX
 AC ADB04271;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Human MD27 scanning oligonucleotide SEQ ID 5257.
 XX
 KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
 KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
 KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
 KW developmental disorder; ss.
 XX
 OS Homo sapiens.
 XX
 PN EPI281758-A2.
 XX
 PD 05-FEB-2003.
 XX
 PF 30-JUL-2002; 2002EP-00016874.
 XX
 PR 02-AUG-2001; 2001US-00922181.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Shannon M, Gu Y, Nguyen C;
 XX
 DR WPI; 2003-423107/40.
 XX
 PT New zinc finger-containing proteins and nucleic acids, useful in
 PT manufacturing a medicament for treating or preventing a disorder
 PT associated with decreased or increased expression or activity of MD23,
 PT MD24, MD27 or MD212, e.g. cancer.
 XX
 PS Example 8; SEQ ID NO 5257; 103pp; English.
 XX

CC The present invention relates to novel human zinc finger-containing
 CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
 CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
 CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
 CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
 CC or in manufacturing a medicament for treating or preventing a disorder
 CC associated with decreased or increased expression or activity of MD23,
 CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
 CC acids and proteins are also useful for diagnosing or monitoring a disease
 CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
 CC acids can also be used as probes to detect and characterize gross
 CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
 CC useful in constructing microarrays for measuring gene expression. The
 CC proteins are useful as therapeutic agents for gene therapy or as
 CC vaccines. The present sequence was used to illustrate the invention.
 XX
 SQ Sequence 17 BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2724
 DB 17 AAAAAAAAAAAAAAAAAA 2
 RESULT 1470
 ADB04272/c
 ID ADB04272 standard; DNA; 17 BP.
 XX
 AC ADB04272;
 XX
 DT 20-NOV-2003 (first entry)
 XX
 DE Human MD27 scanning oligonucleotide SEQ ID 5258.
 XX
 KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
 KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
 KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
 KW developmental disorder; ss.
 XX
 OS Homo sapiens.
 XX
 PN EPI281758-A2.
 XX
 PD 05-FEB-2003.
 XX
 PF 30-JUL-2002; 2002EP-00016874.
 XX
 PR 02-AUG-2001; 2001US-00922181.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Shannon M, Gu Y, Nguyen C;
 XX
 DR WPI; 2003-423107/40.
 XX
 PT New zinc finger-containing proteins and nucleic acids, useful in
 PT manufacturing a medicament for treating or preventing a disorder
 PT associated with decreased or increased expression or activity of MD23,
 PT MD24, MD27 or MD212, e.g. cancer.
 XX
 PS Example 8; SEQ ID NO 5258; 103pp; English.
 XX
 CC The present invention relates to novel human zinc finger-containing
 CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
 CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
 CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
 CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
 CC or in manufacturing a medicament for treating or preventing a disorder
 CC associated with decreased or increased expression or activity of MD23,
 CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic

CC acids and proteins are also useful for diagnosing or monitoring a disease
 CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
 CC acids can also be used as probes to detect and characterize gross
 CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
 CC useful in constructing microarrays for measuring gene expression. The
 CC proteins are useful as therapeutic agents for gene therapy or as
 CC vaccines. The present sequence was used to illustrate the invention.

XX SQ Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
 DB 16 AAAAAAAAAAAAAA 1

RESULT 1471

ACC65266
 ID ACC65266 standard; DNA; 17 BP.

XX AC ACC65266;

XX DT 01-JUL-2003 (first entry)

XX DE Murine oligonucleotide associated with tumour suppression, SEQ ID 2513.

XX KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;
 KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; ss.

XX OS Mus musculus.

XX PN WO2003025176-A2.

XX PD 27-MAR-2003.

XX PF 17-SEP-2002; 2002WO-IB004210.

XX PR 17-SEP-2001; 2001FR-00011979.

XX PA (MOLE-) MOLECULAR ENGINES LAB.

XX PI Telerman A, Amson R, Tuijnder M;

XX DR WPI; 2003-333167/31.

XX PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.

XX PS Disclosure; Page 324; 739pp; French.

XX CC The present invention relates to murine oligonucleotides (ACC62754-
 CC ACC6806), which are associated with tumour suppression, tumour
 CC reversion, apoptosis and virus resistance. The oligonucleotides are
 CC useful as (1) as probes and primers for detecting, identifying,
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
 CC recombinant polypeptides. The oligonucleotides are useful for preparation
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration,
 CC specifically cancer but also Alzheimer's disease and schizophrenia

XX SQ Sequence 17 BP; 1 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 896 GATCTCTGGCTGTGG 911
 DB 1 GATCTCTGGCTGTGG 16

RESULT 1472

ABZ70578/c
 ID ABZ70578 standard; DNA; 17 BP.

XX AC ABZ70578;

XX DT 23-MAY-2003 (first entry)

XX DE Primer.

XX KW Aspergillus phenices; oxalate decarboxylase; APOXD; transgenic plant;
 KW crop protection; primer; ss.

XX OS Synthetic.

XX PN CA2350328-A1.

XX PD 26-DEC-2002.

XX PF 26-JUN-2001; 2001CA-02350328.

XX PR 26-JUN-2001; 2001CA-02350328.

XX PA (PION-) PIONEER HI-BRED INT INC.

XX PI Scelonge C, Bidney D;

XX DR WPI; 2003-248733/25.

XX PT New isolated nucleic acid encoding oxalate decarboxylase from Aspergillus
 PT phenices, for degrading oxalic acid, identifying transformed plant
 PT cells, and preventing pathogenic disease in plants.

XX PS Disclosure; Page 50; 60pp; English.

XX CC The present sequence is that of a primer used in the invention. The
 CC invention relates to a novel nucleic acid (see ABZ70560) encoding
 CC Aspergillus phenices oxalate decarboxylase (APOXD) (see ABP72475). The
 CC gene and its encoded protein are useful in degrading oxalate, in
 CC diagnostic assays, for protecting plants against disease, and as a
 CC selectable marker

XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 1 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724
 DB 17 AAAAAAAAAAAAAA 2

RESULT 1473

ACF36345/c
 ID ACF36345 standard; DNA; 17 BP.

XX AC ACF36345;

XX DT 04-DEC-2003 (first entry)

XX DE Nucleotide sequence of a double stranded product DNA fragment.

XX KW Gene variant identification; restriction enzyme; FokI; ds.

XX OS Synthetic.

XX PN WO2003064689-A2.

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XX PD 07-AUG-2003.
XX PF 28-JAN-2003; 2003WO-IB000255.
XX PR 29-JAN-2002; 2002US-0352245P.
XX PA (GLOB-) GLOBAL GENOMICS AB.
XX PI Lonnberg P, Oldin M, Linnarsson S, Ernfors P;
XX DR WPI; 2003-627619/59.
XX CC Determining polyadenylation sites within transcribed gene sequences
XX PT present in a sample comprises assigning to gene fragments gene candidates
XX PT within a database by comparing signals in the dataset with the database.
XX PS Example; Fig 3; 81pp; English.
XX CC The invention relates to determining the presence of and/or identifying a
XX CC polyadenylation site within a sequence of a transcribed gene or variants
XX CC present in a sample. The method involves assigning to gene fragments gene
XX CC candidates within a database by comparing signals in the dataset with the
XX CC database, the database comprising data representing mRNAs with known
XX CC polyA sites and/or 'virtual genes' representing a possible
XX CC polyadenylation site within an actual gene. The method is useful for
XX CC determining the presence of and/or identifying a polyadenylation site or
XX CC alternative polyadenylation sites within a sequence of a transcribed gene
XX CC or sequences of transcribed gene variants present or potentially present
XX CC in a sample, in identifying gene features, particularly in identifying
XX CC differences between sequence variants that occur in a population of
XX CC nucleic acid molecules, especially in identifying or discovering polyA
XX CC site usage or determining polyA site usage in a nucleic acid sample, and
XX CC gene variants arising from alternative polyA sites. The present sequence
XX CC represents a double stranded product DNA fragment
XX SQ Sequence 17 BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1
RESULT 1474
ACF36370/c
ID ACF36370 standard; DNA; 17 BP.
XX AC ACF36370;
XX DT 04-DEC-2003 (first entry)
XX DE Nucleotide sequence of a double stranded product DNA.
XX KW Nucleic acid manipulation; mRNA profiling; polymerase chain reaction;
XX KW electrophoresis; type II restriction enzyme; FokI; ds.
XX OS Synthetic.
XX PN WO2003064691-A2.
XX PD 07-AUG-2003.
XX PF 28-JAN-2003; 2003WO-IB000843.
XX PR 29-JAN-2002; 2002US-0352215P.
XX PA (GLOB-) GLOBAL GENOMICS AB.
XX PI Linnarsson S, Ernfors P, Bauren G, Metsis A, Pihlak A;

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PI Montelius A;
XX DR WPI; 2003-618365/58.
XX PT Producing a population of double-stranded product DNA molecules, useful
XX PT for mRNA profiling, comprises amplification by nested polymerase chain
XX PT reaction.
XX PS Example; Fig 2; 105pp; English.
XX CC The invention relates to producing a population of double-stranded
XX CC product DNA molecules comprising amplification by a nested PCR method.
XX CC The method is useful in profiling mRNA transcribed in a system under
XX CC investigation. The oligonucleotides are used as size standards in
XX CC electrophoresis, and as internal controls allowing for calculation of
XX CC relative amounts of material present. The present sequence represents a
XX CC double stranded product DNA, which aids in outlining an approach to
XX CC production of a single pattern characteristic of a sample, employing a
XX CC type II restriction enzyme (FokI)
XX SQ Sequence 17 BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAA 2724
Db 16 AAAAAAAAAAAAAA 1
RESULT 1475
ADC84468/c
ID ADC84468 standard; DNA; 17 BP.
XX AC ADC84468;
XX DT 01-JAN-2004 (first entry)
XX DE PCR primer for amplifying plant blastogenesis specific gene #SEQ ID 1.
XX KW Plant blastogenesis; transformation; gene expression; tissue specific;
XX KW PCR; primer; ss.
XX OS Synthetic.
XX PN JP2003159071-A.
XX PD 03-JUN-2003.
XX PF 22-NOV-2001; 2001JP-00358366.
XX PR 22-NOV-2001; 2001JP-00358366.
XX PA (DOKU-) DOKURITSU GYOSEI HOJIN NOGYO SEIBUTSU SH.
XX DR WPI; 2003-818678/77.
XX CC New naturally derived DNA specifically expressed during blastogenesis of
XX PT a plant, useful for producing a transformed plant and for compulsive
XX PT expression of a protein.
XX PS Example 3; SEQ ID NO 1; 43pp; Japanese.
XX CC The invention relates to naturally derived DNA specifically expressed
XX CC during plant blastogenesis. The DNA of the invention is useful for
XX CC producing a transformed plant. Methods of the invention are also useful
XX CC for compulsive expression of this DNA. Methods of the invention are
XX CC useful for plant tissue specific expression of genes. Also, the growth
XX CC stage of a plant can be controlled specifically. The current sequence
XX CC represents a PCR primer for amplifying a plant blastogenesis specific
XX CC gene of the invention.

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SQ		Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;	
		Query Match 0.6%; Score 16; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 1.1e+03; Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
Qy	2708	TAAAAAAAAAAAAA 2723 	
Dd	17	TAAAAAAAAAAAAA 2	
		RESULT 1476 ADF47483/C ID ADf47483 standard; DNA; 17 BP. XX AC ADF47483; XX XX DT 12-FEB-2004 (first entry) XX DE Gene prediction target fragment related primer, SEQ ID NO 3. XX KW gene prediction; database; genetic analysis; primer; ss. XX OS Unidentified. XX PN US2003175759-A1. XX PD 18-SEP-2003. XX PF 04-DEC-2002; 2002US-00309152. XX PR 25-FEB-2002; 2002JP-00047297. XX PA (HITA) HITACHI LTD. XX PI Muramatsu T, Yamamoto A; XX WI P; 2003-852125/79. XX PT Identifying novel and useful genes by searching a database utilizing size information about known nucleotide sequences to a specific sequence in a target fragment and the information about the specific sequence to extract a predicted gene.	
		Disclosure; SEQ ID NO 3; 28pp; English.	
CC	The invention relates to novel gene prediction methods. The novel methods comprise searching a gene database and utilising the information about the size of a known nucleotide sequence to a specific sequence in a target fragment and using the information about the specific sequence to extract a predicted gene. The methods are used for identifying novel and useful genes. The novel gene prediction methods make it possible to predict a gene contained in a DNA fragment obtained as a result of gene expression analysis effectively in a simple and easy manner. The methods make it possible to predict and identify a target fragment gene rapidly, CC efficiency of genetic analysis is markedly improved. This CC polynucleotide sequence represents a primer used in the exemplification CC of the invention.		
SQ	Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;		
		Query Match 0.6%; Score 16; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 1.1e+03; Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
Qy	2708	TAAAAAAAAAAAAA 2723 	
Dd	17	TAAAAAAAAAAAAA 2	
		RESULT 1477 ADF62257 ID ADF62257 standard. DNA. 17 RP. XX AC ADF62258; XX DT 12-FEB-2004 (first entry)	
DE	Human PCCPl DNA fragment SEQ ID 4-directed probe - SEQ ID 162.		
KW	chromatin organisation modifier; CHROMO domain; cytostatic; PCCPl; prostate cancer candidate protein 1; tumour; gene therapy; vaccine; human; ss; probe.		
OS	Homo sapiens.		
PN	WO2003050284-A1.		
PD	19-JUN-2003.		
PP	22-NOV-2002; 2002MO-US037506.		
PR	10-DEC-2001; 2001US-0339764P.		
PA	(AMSH) AMERSHAM BIOSCIENCES SV CORP.		
PI	Guo J;		
DR	WPI; 2003-532916/50.		
XZ	New prostate cancer candidate protein 1 (PCCPl), useful for preparing a composition for treating or preventing a disorder associated with decreased or increased expression or activity of PCCPl e.g., tumor.		
PS	Example 2; SEQ ID NO 161; 164pp; English.		
CC	The invention relates to a novel isolated nucleic acid that encodes a protein with a chromatin organisation modifier (CHROMO) domain. The polynucleotide of the invention demonstrates cytostatic activity and may be useful for preparing a composition for treating or preventing a disorder associated with decreased or increased expression or activity of PCCPl (prostate cancer candidate protein 1), such as a tumour, as well as during gene therapy and vaccine production procedures. The current sequence is that of the human PCCPl-related DNA fragment SEQ ID 4-directed probe of the invention. Note: The current sequence is not shown within the specification per se but was retrieved from the WipoWeb database.		
SQ	Sequence 17 BP; 11 A; 1 C; 5 G; 0 T; 0 U; 0 Other;		
		Query Match 0.6%; Score 16; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 1.1e+03; Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	
Qy	703	AGAGGAAGAACAAGAA 718 	
Dd	2	AGAGGAAGAACAAGAA 17 	
		RESULT 1478 ADF62258 ID ADF62258 standard; DNA; 17 BP. XX AC ADF62258; XX DT 12-FEB-2004 (first entry)	
DE	Human PCCPl DNA fragment SEQ ID 4-directed probe - SEQ ID 162.		
KW	chromatin organisation modifier; CHROMO domain; cytostatic; PCCPl; prostate cancer candidate protein 1; tumour; gene therapy; vaccine; human; ss; probe.		
OS	Homo sapiens.		
PN	WO2003050284-A1.		


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XX 19-JUN-2003.
PD
XX
XX 22-NOV-2002; 2002WO-US037506.
PF
XX
XX 10-DEC-2001; 2001US-0339764P.
PR
XX
XX (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
PA
XX
XX Guo J;
PI
XX
XX WPI; 2003-532916/50.
DR
XX
XX New prostate cancer candidate protein 1 (PCCP1), useful for preparing a
PT composition for treating or preventing a disorder associated with
PT decreased or increased expression or activity of PCCP1 e.g., tumor.
XX
XX Example 2; SEQ ID NO 162; 164pp; English.
PS
XX
XX The invention relates to a novel isolated nucleic acid that encodes a
CC protein with a chromatin organisation modifier (CHROMO) domain. The
CC polynucleotide of the invention demonstrates cytostatic activity and may
CC be useful for preparing a composition for treating or preventing a
CC disorder associated with decreased or increased expression or activity of
CC PCCP1 (prostate cancer candidate protein 1), such as a tumour, as well as
CC during gene therapy and vaccine production procedures. The current
CC sequence is that of the human PCCP1-related DNA fragment SEQ ID 4-
CC directed probe of the invention. Note: The current sequence is not shown
CC within the specification per se but was retrieved from the Wipoweb
CC database.
XX
XX Sequence 17 BP; 11 A; 1 C; 5 G; 0 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 703 AGAGGAAGAACAAAGAA 718
Db 1 AGAGGAAGAACAAAGAA 16

RESULT 1479
ADL48488/c
ID ADL48488 standard; RNA; 17 BP.
XX
XX ADL48488;
AC
XX
XX 20-MAY-2004 (first entry)
DT
XX
XX Human IKK-gamma substrate sequence #998.
DE
XX
XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
KW substrate; ds.
XX
XX Unidentified.
OS
XX
XX WO200281628-A2.
PN
XX
XX 17-OCT-2002.
PD
XX
XX 03-APR-2002; 2002WO-US010512.
PF
XX
XX 05-APR-2001; 2001US-00827395.
PR
XX
XX 29-MAY-2001; 2001US-0294412P.
PR

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PR 28-AUG-2001; 2001US-0315315P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX
XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Foenaugh K;
PI
XX
XX WPI; 2003-058513/05.
DR
XX
XX Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
XX Claim 59; SEQ ID NO 2021; 317pp; English.
PS
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human IKK-
CC gamma substrate sequence.
XX
XX Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;
XX
Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2535 GGCTTTGTCTCTCAGCC 2550
Db 16 GGCTTTGTCTCTCAGCC 1

RESULT 1480
ADL48641/c
ID ADL48641 standard; RNA; 17 BP.
XX
XX ADL48641;
AC
XX
XX 20-MAY-2004 (first entry)
DT
XX
XX Human IKK-gamma substrate sequence #1151.
DE
XX
XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
KW substrate; ds.
XX
XX Unidentified.
OS
XX
XX WO200281628-A2.
PN
XX
XX 17-OCT-2002.
PD
XX
XX 03-APR-2002; 2002WO-US010512.
PF
XX
XX 05-APR-2001; 2001US-00827395.
PR
XX
XX 29-MAY-2001; 2001US-0294412P.
PR

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PR 28-AUG-2001; 2001US-0315315P.
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX WPI; 2003-058513/05.
XX
XX Novel enzymatic nucleic acid that down-regulates expression of neurite
XX growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
XX protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
XX Claim 59; SEQ ID NO 2174; 317pp; English.
XX
XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
XX that down regulate the expression or inhibit the function of a receptor
XX for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
XX IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
XX invention are useful for treating: cerebrovascular accident, central
XX nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
XX lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
XX restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
XX disease, lupus, multiple sclerosis, transplant/graft rejection,
XX ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
XX conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
XX nucleic acids of the invention are also useful for down-regulating the
XX expression of a target gene and as a diagnostic tool to examine genetic
XX drifts and mutations within diseased cells or to detect the presence of a
XX target RNA in a cell. The present RNA sequence represents a human IKK-
XX gamma substrate sequence.
XX
XX Sequence 17 BP; 5 A; 3 C; 7 G; 0 T; 2 U; 0 Other;
SQ
    Query Match      0.6%; Score 16; DB 1; Length 17;
    Best Local Similarity 100.0%; Pred. No. 1.1e+03;
    Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2536 GCCTTGCTCTCAGCCA 2551
Db      |||||
        17 GCCTTGCTCTCAGCCA 2

RESULT 1491
AD113009/c
ID AD113009 standard; DNA; 17 BP.
XX
XX AC AD113009;
XX
XX DT 22-APR-2004 (first entry)
XX
XX DE PCR primer GT15A used to amplify human NOR-1 (MINOR) DNA SeqID 3.
XX
XX KW human; PCR; ss; allergic disease; NOR-1; MINOR; eosinophil;
XX KW atopic dermatitis; antiallergic; antiinflammatory; dermatological;
XX KW primer.
XX
XX OS Homo sapiens.
XX
XX PN WO2004003198-A1.
XX
XX PD 08-JAN-2004.
XX
XX PF 27-JUN-2003; 2003WO-JP008199.
XX
XX PR 27-JUN-2002; 2002JP-00188490.
XX
XX (GENO-) GENOX RES INC.
XX (NIGE-) JAPAN GEN AGENCY NATION.
XX
XX Hashida R, Kagaya S, Yayoi Y, Sugita Y, Saito H;
XX
XX WPI; 2004-083057/08.
XX

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PT Examining allergic diseases e.g. atopic dermatitis by differential
PT display based on gene expression of NOR-1 receptor protein, also
PT applicable in screening compounds for treatment of allergic diseases.
XX
XX Example 1; SEQ ID NO 3; 155pp; Japanese.
XX
XX This invention relates to a novel method for examining allergic diseases
XX that comprises comparing the expression levels of a gene encoding the NOR
XX -1 receptor protein between patients and healthy individuals
XX Specifically, the NOR-1 gene, also referred to as MINOR, is expressed in
XX the specialist white blood cells known as eosinophils and is involved in
XX mediating an allergic reaction. The present invention describes a
XX differential display method that can identify the expression level of
XX this gene in order to identify its usefulness in diagnosing allergic
XX diseases such as atopic dermatitis. Furthermore, compositions can also be
XX used to screen compounds for the treatment of allergic diseases.
XX Accordingly, they exhibit various activities including antiallergic,
XX antiinflammatory and dermatological. This oligonucleotide sequence is a
XX PCR primer used to amplify human NOR-1 DNA in an exemplification of the
XX invention.
XX
XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
SQ
    Query Match      0.6%; Score 16; DB 1; Length 17;
    Best Local Similarity 100.0%; Pred. No. 1.1e+03;
    Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAATAAAAAAAAAAAAAA 2723
Db      |||||
        17 TAAATAAAAAAAAAAAAAA 2

RESULT 1482
AED81275/c
ID AED81275 standard; DNA; 17 BP.
XX
XX AC AED81275;
XX
XX DT 26-JAN-2006 (first entry)
XX
XX DE IL-10 expression assay, test oligonucleotide SEQ ID No:33.
XX
XX KW pharmaceutical; therapeutic; immune stimulation; immune response;
XX KW allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
XX KW immunosuppressive; phosphorothioate; ss.
XX
XX OS Synthetic.
XX
XX PN WO2005111057-A2.
XX
XX PD 24-NOV-2005.
XX
XX PF 04-APR-2005; 2005WO-US011827.
XX
XX PR 02-APR-2004; 2004US-0558951P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Vollmer J;
XX
XX WPI; 2005-786756/80.
XX
XX New oligonucleotides, useful for treating an allergy or asthma, or an
XX autoimmune disease, arthritis, systemic lupus erythematosus, multiple
XX sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
XX
XX Example; SEQ ID NO 33; 111pp; English.
XX
XX The invention relates to an oligonucleotide having the formula: (a) 5'
XX XYN1YZN2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
XX denotes the 3' end of the oligonucleotide, where X is a T or modified T
XX nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
XX

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CC dinucleotide, and N1 and N2 are polynucleotides that do not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
CC polynucleotide consisting of the YZ dinucleotide and the N2
CC polynucleotide contains a number of nucleotides that is at most 45% of
CC the number of nucleotides in the oligonucleotide; and (b) 5' XN1YN2 3',
CC where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3',
CC end of the oligonucleotide, where X is a T or modified T nucleotide, Y is
CC a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
CC polynucleotide of 5-10 nucleotides, where N1 does not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
CC a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
CC pharmaceutical composition comprising the oligonucleotide in combination
CC with a therapeutic agent selected from chemotherapeutic agents,
CC radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
CC (2) a method of specifically increasing interleukin (IL)-10 expression
CC relative to interferon (IFN)-alpha expression in a subject, comprising
CC administering an oligonucleotide or a pharmaceutical composition to the
CC subject in need of increased IL-10 expression relative to IFN-alpha
CC expression; (3) a method of inducing an antigen-specific regulatory T
CC cell response in a subject by administering an immunostimulatory nucleic
CC acid or composition to a subject exposed to an antigen; (4) a method of
CC inducing an antigen-specific regulatory B cell response in a subject by
CC administering an immunostimulatory nucleic acid or composition to a
CC subject exposed to an antigen; (5) a method of treating an allergy or
CC asthma by exposing a subject to an allergen; (6) a method of treating an
CC immunostimulatory nucleic acid or composition to the subject, where the
CC immunostimulatory nucleic acid or composition is administered in an
CC amount sufficient to prevent or treat an autoimmune disease in the
CC subject; and (7) a method of reducing an antigen-specific response to an
CC implant in a subject by exposing a subject to an implant antigen, and
CC administering an immunostimulatory nucleic acid or composition to the
CC subject, where the immunostimulatory nucleic acid or composition is
CC administered in an amount sufficient to prevent or reduce an antigen-
CC specific response to the implant in the subject. The oligonucleotide
CC includes at least 1 modified internucleotide linkage such as a
CC phosphorothioate linkage. The oligonucleotide, methods and compositions
CC of the invention are useful for treating allergies, asthma, autoimmune
CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
CC disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
CC hepatitis, immune-mediated diabetes mellitus, Grave's Disease,
CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune
CC disease of the adrenal gland, rheumatoid arthritis, scleroderma,
CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
CC an infection e.g. Lyme disease. This sequence represents an
CC oligonucleotide used in experiments in the examples of the present
CC invention.

XX Sequence 17 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 1 Other;

Query Match 0.6%; Score 16; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2725
|||||
Db 17 AAAAAAAAAAAAAA 1

RESULT 1483
AED81272/c
ID AED81272 standard; DNA; 17 BP.
XX

AC AED81272;
XX 26-JAN-2006 (first entry)
XX IL-10 expression assay, test oligonucleotide SEQ ID No:30.
XX pharmaceutical; therapeutic; immune stimulation; immune response;
KW allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
KW immunosuppressive; phosphorothioate; ss.
XX Synthetic.
XX WO2005111057-A2.
XX 24-NOV-2005.
XX 04-APR-2005; 2005WO-US011827.
XX 02-APR-2004; 2004US-0558951P.
XX (COLE-) COLEY PHARM GROUP INC.
PA (COLE-) COLEY PHARM GMBH.
PI Krieg AM, Vollmer J;
XX WPI; 2005-786756/80.
XX New oligonucleotides, useful for treating an allergy or asthma, or an
PT autoimmune disease, arthritis, systemic lupus erythematosus, multiple
PT sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
XX Example; SEQ ID NO 30; 111pp; English.
XX The invention relates to an oligonucleotide having the formula: (a) 5'
CC XN1YN2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
CC denotes the 3' end of the oligonucleotide, where X is a T or modified T
CC nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
CC nucleotide, and N1 and N2 are polynucleotides that do not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
CC polynucleotide consisting of the YZ dinucleotide and the N2
CC polynucleotide contains a number of nucleotides that is at most 45% of
CC the number of nucleotides in the oligonucleotide; and (b) 5' XN1YN2 3',
CC where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3',
CC end of the oligonucleotide, where X is a T or modified T nucleotide, Y is
CC a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
CC polynucleotide of 5-10 nucleotides, where N1 does not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
CC a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
CC pharmaceutical composition comprising the oligonucleotide in combination
CC with a therapeutic agent selected from chemotherapeutic agents,
CC radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
CC (2) a method of specifically increasing interleukin (IL)-10 expression
CC relative to interferon (IFN)-alpha expression in a subject, comprising
CC administering an oligonucleotide or a pharmaceutical composition to the
CC subject in need of increased IL-10 expression relative to IFN-alpha
CC expression; (3) a method of inducing an antigen-specific regulatory T
CC cell response in a subject by administering an immunostimulatory nucleic
CC acid or composition to a subject exposed to an antigen; (4) a method of
CC inducing an antigen-specific regulatory B cell response in a subject by
CC administering an immunostimulatory nucleic acid or composition to a
CC subject exposed to an antigen; (5) a method of treating an allergy or
CC asthma by exposing a subject to an allergen; (6) a method of treating an
CC immunostimulatory nucleic acid or composition to the subject, where the
CC immunostimulatory nucleic acid or composition is administered in an
CC amount sufficient to prevent or alleviate an allergic response to the
CC allergen in the subject; (7) a method of treating an autoimmune disease
CC in a subject by exposing a subject to a self antigen, and administering
CC an immunostimulatory nucleic acid or composition to the subject, where
CC the immunostimulatory nucleic acid or composition is administered in an
CC amount sufficient to prevent or treat an autoimmune disease in the
CC subject; and (7) a method of reducing an antigen-specific response to an
CC implant in a subject by exposing a subject to an implant antigen, and
CC administering an immunostimulatory nucleic acid or composition to the

CC subject, where the immunostimulatory nucleic acid or composition is
 CC administered in an amount sufficient to prevent or reduce an antigen-
 CC specific response to the implant in the subject. The oligonucleotide
 CC includes at least 1 modified internucleotide linkage such as a
 CC phosphorothioate linkage. The oligonucleotide, methods and compositions
 CC of the invention are useful for treating allergies, asthma, autoimmune
 CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
 CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
 CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
 CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
 CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
 CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
 CC disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
 CC hepatitis, immune-mediated diabetes mellitus, Grave's Disease,
 CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune
 CC disease of the adrenal gland, rheumatoid arthritis, scleroderma,
 CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
 CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
 CC an infection e.g. Lyme disease. This sequence represents an
 CC oligonucleotide used in experiments in the examples of the present
 CC invention.
 XX
 SQ Sequence 17 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 1 Other;
 Query Match 0.6%; Score 16; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAA 2725
 DB 17 AAAAAAAAAAAAAAA 1
 RESULT 1484
 AAN30173
 ID AAN30173 standard; DNA; 18 BP.
 XX
 AC AAN30173;
 XX
 DT 09-SEP-2004 (revised)
 DT 05-APR-1992 (first entry)
 XX
 DE L1 region of the bovine papillomavirus type 1a genome, fragment.
 XX
 KW Diagnostic reagent; vaccine; medicine; wart; tumour; ss.
 XX
 OS Bovine papillomavirus.
 OS Unidentified.
 XX
 FH Key Location/Qualifiers
 FT CDS 1..18
 FT /*tag= a
 XX
 PN EP92456-A.
 XX
 XX 26-OCT-1983.
 XX
 XX 01-APR-1983; 83EP-00901081.
 XX
 XX 05-APR-1982; 82FR-00005887.
 XX
 XX (INSP) INST PASTEUR.
 PA (DANO/) DANOS O.
 XX
 XX Danos O, Katinka M, Yaniv M;
 XX
 XX WPI; 1983-802979/44.
 DR P-PSDB; AAP30313.
 XX
 XX DNA fragment coding for Papillomavirus antigenic proteins - and derived
 PT immunogen, vaccine and antibody.
 XX
 XX Claim 6; Page 16; 25pp; French.
 PS

XX The inventors claim DNA fragments capable of expressing, in a host, a
 CC prod. contg. at least one antigenic determinant of papillomavirus (PV).
 CC (see AAN30170-N30173). Also claimed are immunogens consisting of at least
 CC one peptide sequence coded for by the DNA fragments (see AAP30310-
 CC P30313), vaccines contg. the immunogens and antibodies raised from them.
 CC The vaccines are useful in human and veterinary medicine and the
 CC antibodies are useful as diagnostic reagents. The DNA fragments are most
 CC esp. derived from the L1 region of human PV type 1a
 CC
 CC Revised record issued on 09-SEP-2004 : Correction of feature table key
 XX
 SQ Sequence 18 BP; 16 A; 1 C; 1 G; 0 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAA 2724
 DB 3 AAAAAAAAAAAAAAA 18
 RESULT 1485
 AAV54173/C
 ID AAV54173 standard; cDNA; 18 BP.
 XX
 AC AAV54173;
 XX
 DT 21-DEC-1998 (first entry)
 XX
 DE Nucleotide sequence PCR primer 10.
 XX
 KW PCR; primer; amplification; apoptosis; antibody; inhibition; ss;
 KW immunohistological staining.
 XX
 OS Synthetic.
 XX
 XX WO9839437-A1.
 PD 11-SEP-1998.
 XX
 XX 05-MAR-1998; 98WO-JP000905.
 PF
 XX 05-MAR-1997; 97JP-00050302.
 PR
 XX (KYOW) KYOWA HAKKO KOGYO KK.
 PA Sakaki Y;
 PI
 XX WPI; 1998-495844/42.
 DR
 XX Novel apoptosis-related DNAs and proteins - for diagnosis, preventing or
 PT treating diseases associated with apoptosis.
 XX
 XX Example 1; Page 50; 70pp; Japanese.
 PS
 XX This is the nucleotide sequence of a PCR primer used in the method of the
 CC invention, involving the use of novel apoptosis-related DNAs and
 CC proteins. The inventions can be used as diagnostic reagents for apoptosis
 CC e.g. (monoclonal) antibodies for the protein, as a reagent in
 CC immunohistological staining, as apoptosis inhibitors. It can also be used
 CC for treatment of apoptosis-related diseases
 XX
 XX Sequence 18 BP; 1 A; 1 C; 1 G; 15 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 16; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAAA 2723
 DB 17 TAAAAAAAAAAAAAA 2

```

RESULT 1486
AAV54164/c
ID AAV54164 standard; cDNA; 18 BP.
XX
XX
AC AAV54164;
XX
DT 21-DEC-1998 (first entry)
XX
DE Nucleotide sequence PCR primer 1.
XX
KW PCR; primer; amplification; apoptosis; antibody; inhibition; ss;
KW immunohistological staining.
XX
OS Synthetic.
XX
PN WO9839437-A1.
XX
PD 11-SEP-1998.
XX
PF 05-MAR-1998; 98WO-JP000905.
XX
PR 05-MAR-1997; 97JP-00050302.
XX
PA (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI Sakaki Y;
XX
DR WPI; 1998-495844/42.
XX
PT Novel apoptosis-related DNAs and proteins - for diagnosis, preventing or
PT treating diseases associated with apoptosis.
XX
PS Example 1; Page 47; 70pp; Japanese.
XX
CC This is the nucleotide sequence of a PCR primer used in the method of the
CC invention, involving the use of novel apoptosis-related DNAs and
CC proteins. The inventions can be used as diagnostic reagents for apoptosis
CC e.g. (monoclonal) antibodies for the protein, as a reagent in
CC immunohistological staining, as apoptosis inhibitors. It can also be used
CC for treatment of apoptosis-related diseases
XX
SQ Sequence 18 BP; 2 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAA
Db 17 TAAAAA

RESULT 1487
AAV54167/c
ID AAV54167 standard; cDNA; 18 BP.
XX
XX
AC AAV54167;
XX
DT 21-DEC-1998 (first entry)
XX
DE Nucleotide sequence PCR primer 4.
XX
KW PCR; primer; amplification; apoptosis; antibody; inhibition; ss;
KW immunohistological staining.
XX
OS Synthetic.
XX
PN WO9839437-A1.
XX
PD 11-SEP-1998.
XX
PF 05-MAR-1998; 98WO-JP000905.
XX
PR 05-MAR-1997; 97JP-00050302.
XX
PA (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI Sakaki Y;
XX
DR WPI; 1998-495844/42.
XX
PT Novel apoptosis-related DNAs and proteins - for diagnosis, preventing or
PT treating diseases associated with apoptosis.
XX
PS Example 1; Page 47; 70pp; Japanese.
XX
CC This is the nucleotide sequence of a PCR primer used in the method of the
CC invention, involving the use of novel apoptosis-related DNAs and
CC proteins. The inventions can be used as diagnostic reagents for apoptosis
CC e.g. (monoclonal) antibodies for the protein, as a reagent in
CC immunohistological staining, as apoptosis inhibitors. It can also be used
CC for treatment of apoptosis-related diseases
XX
SQ Sequence 18 BP; 2 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAA
Db 17 TAAAAA

RESULT 1488
AAZ90649/c
ID AAZ90649 standard; DNA; 18 BP.
XX
AC AAZ90649;
XX
DT 13-JUN-2000 (first entry)
XX
DE Human adipose tissue gene amplifying primer #10.
XX
KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.
OS Homo sapiens.
XX
PN JP2000037190-A.
XX
PD 08-FEB-2000.
XX
PF 23-JUL-1998; 98JP-00225228.
XX
PR 23-JUL-1998; 98JP-00225228.
XX
PA (NISB ) JAPAN TOBACCO INC.
XX
DR WPI; 2000-306578/27.
XX
PT A physiologically active protein specifically derived from mammal tissue.
XX
PS Example 2; Page 18; 50pp; Japanese.
XX
CC The invention relates to identification of genes and proteins of adipose
CC tissue relating to obesity, particularly complications of visceral
CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
CC proteins (AAV67598-Y67600) are used in the genetic diagnosis, prevention
CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
CC represent PCR primers amplifying the human adipose tissue genes
XX
SQ Sequence 18 BP; 1 A; 1 C; 1 G; 15 T; 0 U; 0 Other;

```

```

PF 05-MAR-1998; 98WO-JP000905.
XX
PR 05-MAR-1997; 97JP-00050302.
XX
PA (KYOW ) KYOWA HAKKO KOGYO KK.
XX
PI Sakaki Y;
XX
DR WPI; 1998-495844/42.
XX
PT Novel apoptosis-related DNAs and proteins - for diagnosis, preventing or
PT treating diseases associated with apoptosis.
XX
PS Example 1; Page 48; 70pp; Japanese.
XX
CC This is the nucleotide sequence of a PCR primer used in the method of the
CC invention, involving the use of novel apoptosis-related DNAs and
CC proteins. The inventions can be used as diagnostic reagents for apoptosis
CC e.g. (monoclonal) antibodies for the protein, as a reagent in
CC immunohistological staining, as apoptosis inhibitors. It can also be used
CC for treatment of apoptosis-related diseases
XX
SQ Sequence 18 BP; 1 A; 0 C; 1 G; 16 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAA
Db 17 TAAAAA

RESULT 1488
AAZ90649/c
ID AAZ90649 standard; DNA; 18 BP.
XX
AC AAZ90649;
XX
DT 13-JUN-2000 (first entry)
XX
DE Human adipose tissue gene amplifying primer #10.
XX
KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.
OS Homo sapiens.
XX
PN JP2000037190-A.
XX
PD 08-FEB-2000.
XX
PF 23-JUL-1998; 98JP-00225228.
XX
PR 23-JUL-1998; 98JP-00225228.
XX
PA (NISB ) JAPAN TOBACCO INC.
XX
DR WPI; 2000-306578/27.
XX
PT A physiologically active protein specifically derived from mammal tissue.
XX
PS Example 2; Page 18; 50pp; Japanese.
XX
CC The invention relates to identification of genes and proteins of adipose
CC tissue relating to obesity, particularly complications of visceral
CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
CC proteins (AAV67598-Y67600) are used in the genetic diagnosis, prevention
CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
CC represent PCR primers amplifying the human adipose tissue genes
XX
SQ Sequence 18 BP; 1 A; 1 C; 1 G; 15 T; 0 U; 0 Other;

```

```
Query Match      0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA...AAAAA 2723
Db 17 TAAAAA...AAAAA 2

RESULT 1489
AAZ90646/c
ID AAZ90646 standard; DNA; 18 BP.
XX AC AAZ90646;
XX DT 13-JUN-2000 (first entry)
XX DE Human adipose tissue gene amplifying primer #7.
XX KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
XX KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.
XX OS Homo sapiens.
XX PN JP2000037190-A.
XX PD 08-FEB-2000.
XX PF 23-JUL-1998; 98JP-00225228.
XX PR 23-JUL-1998; 98JP-00225228.
XX PA (NISB ) JAPAN TOBACCO INC.
XX DR WPI; 2000-306578/27.
XX PT A physiologically active protein specifically derived from mammal tissue.
XX PS Example 2; Page 18; 50pp; Japanese.
XX CC The invention relates to identification of genes and proteins of adipose
XX CC tissue relating to obesity, particularly complications of visceral
XX CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
XX CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
XX CC proteins (AAZ90631-633) are used in the genetic diagnosis, prevention
XX CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
XX CC represent PCR primers amplifying the human adipose tissue genes
XX SQ Sequence 18 BP; 2 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match      0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA...AAAAA 2723
Db 17 TAAAAA...AAAAA 2

RESULT 1490
AAZ90643/c
ID AAZ90643 standard; DNA; 18 BP.
XX AC AAZ90643;
XX DT 13-JUN-2000 (first entry)
XX DE Human adipose tissue gene amplifying primer #4.
XX KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
XX KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.
XX SQ Sequence 18 BP; 2 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match      0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA...AAAAA 2723
Db 17 TAAAAA...AAAAA 2

RESULT 1491
AAZ90643/c
ID AAZ90643 standard; DNA; 18 BP.
XX AC AAZ90643;
XX DT 10-MAY-2001 (first entry)
XX DE Binary encoded sequence tag method anchored primer #1.
XX KW Binary encoded sequence tag; BEST; nucleic acid analysis;
XX KW gene expression; adaptor; PCR primer; ss.
XX OS Synthetic.
XX PN WO200112855-A2.
XX PD 22-FEB-2001.
XX PF 11-AUG-2000; 2000WO-US022164.
XX PR 13-AUG-1999; 99US-0148870P.
XX PR 06-APR-2000; 2000US-00544713.
XX PA (UYVA ) UNIV YALE.
XX PI Kaufman JC, Roth ME, Lizardi PM, Feng L, Latimer DR;
XX DR WPI; 2001-202878/20.
XX PT Producing binary sequence tags, useful for analyzing nucleic acid
XX PT sequence tags, gene expression or gene-expression patterns, involves
XX PT generating nucleic acid fragments, which are mixed with offset adaptors
XX PT and adaptor-indexers.
XX PS Disclosure; Page 100; 101pp; English.
```

```
OS Homo sapiens.
XX JP2000037190-A.
XX PD 08-FEB-2000.
XX PF 23-JUL-1998; 98JP-00225228.
XX PR 23-JUL-1998; 98JP-00225228.
XX PA (NISB ) JAPAN TOBACCO INC.
XX DR WPI; 2000-306578/27.
XX PT A physiologically active protein specifically derived from mammal tissue.
XX PS Example 2; Page 18; 50pp; Japanese.
XX CC The invention relates to identification of genes and proteins of adipose
XX CC tissue relating to obesity, particularly complications of visceral
XX CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
XX CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
XX CC proteins (AAZ90631-633) are used in the genetic diagnosis, prevention
XX CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
XX CC represent PCR primers amplifying the human adipose tissue genes
XX SQ Sequence 18 BP; 1 A; 0 C; 1 G; 16 T; 0 U; 0 Other;

Query Match      0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA...AAAAA 2723
Db 17 TAAAAA...AAAAA 2

RESULT 1491
AAZ90643/c
ID AAZ90643 standard; DNA; 18 BP.
XX AC AAZ90643;
XX DT 10-MAY-2001 (first entry)
XX DE Binary encoded sequence tag method anchored primer #1.
XX KW Binary encoded sequence tag; BEST; nucleic acid analysis;
XX KW gene expression; adaptor; PCR primer; ss.
XX OS Synthetic.
XX PN WO200112855-A2.
XX PD 22-FEB-2001.
XX PF 11-AUG-2000; 2000WO-US022164.
XX PR 13-AUG-1999; 99US-0148870P.
XX PR 06-APR-2000; 2000US-00544713.
XX PA (UYVA ) UNIV YALE.
XX PI Kaufman JC, Roth ME, Lizardi PM, Feng L, Latimer DR;
XX DR WPI; 2001-202878/20.
XX PT Producing binary sequence tags, useful for analyzing nucleic acid
XX PT sequence tags, gene expression or gene-expression patterns, involves
XX PT generating nucleic acid fragments, which are mixed with offset adaptors
XX PT and adaptor-indexers.
XX PS Disclosure; Page 100; 101pp; English.
```

XX The present invention describes a method of producing binary sequence
CC tags from nucleic acid fragments in a sample, involving incubating the
CC sample with cleaving reagents, mixing offset adaptors with the sample,
CC incubating with more cleaving reagents and mixing the sample with adaptor
CC -indexers where the adaptors are coupled to binary sequence tags. The
CC method is useful in sequence analysis, including analysis and comparison
CC of gene expression, nucleic acid samples and genomes
XX SQ Sequence 18 BP; 0 A; 1 C; 1 G; 16 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAA 2724
| | | | | | | | | | | | | | | | | | | |
Db 16 AAAAAAAAAAAAAA 1
RESULT 1492
ABK51158/c
ID ABK51158 standard; DNA; 18 BP.
AC ABK51158;
XX
DT 30-JUL-2002 (first entry)
XX
DE Human cytomegalovirus (HCMV) RT-PCR primer TXN.
XX
KW Human cytomegalovirus; HCMV; virucide; cytomegalovirus' infection; CMV;
KW cellular kinase; RICK; RIP; Nck-interacting kinase; MKK3; SRPK-2;
KW reverse transcriptase PCR; RT-PCR; primer; ss.
XX
OS Human cytomegalovirus.
XX
FH Key Location/Qualifiers
FT misc_difference 17
FT /*tag= a
FT /label= n
FT /note= "n= dATP, dCTP or dGTP"
XX
PN EPI201765-A2.
XX
PD 02-MAY-2002.
XX
PF 15-OCT-2001; 2001EP-00124604.
XX
PR 16-OCT-2000; 2000US-0240750P.
XX
PA (AXXI-) AXXIMA PHARM AG.
XX
PI Schubart D, Habenberger P, Stein-Gerlach M, Bevec D;
XX WPI; 2002-373930/41.
XX
PT Identifying agents for treatment or prevention of cytomegalovirus
PT infection, comprises contacting test compound with cellular kinase and
PT detecting change in cellular kinase activity.
XX
PS Example 1; Page 13; 49pp; English.
XX
CC The present invention relates to a new method for identifying compounds
CC for treating and/or preventing cytomegalovirus (CMV) infection and/or
CC related diseases. The method of the invention comprises contacting a test
CC compound with at least one of the cellular kinases RICK, RIP, Nck-
CC interacting kinase, MKK3 and SRPK-2 and detecting any change in kinase
CC activity. The method of the invention can be used to treat and/or prevent
CC CMV infections and related diseases. Oligonucleotides that can detect the
CC specified kinases can also be used for diagnosis of infection. The
CC present nucleic acid sequence represents human CMV reverse transcriptase
CC (Rt)-PCR primer TXN that was used in the methods of the invention for
CC preparation of radioactively labelled cDNA probes

XX SQ Sequence 18 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 2 Other;
Query Match 0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAA 2724
| | | | | | | | | | | | | | | | | | | |
Db 16 AAAAAAAAAAAAAA 1
RESULT 1493
AAD52799/c
ID AAD52799 standard; DNA; 18 BP.
XX
AC AAD52799;
XX
DT 14-MAY-2003 (first entry)
XX
DE Primer used to prepare radioactively labelled cDNA probes from RNA.
XX
KW Human; pyridylpyrimidine derivative; cellular protein kinase; Scrapie;
KW cellular protein phosphatase; cellular signal transduction; prophylaxis;
KW prion infection; chronic wasting disease; CWD; Creutzfeldt-Jacob disease;
KW CJD; transmissible mink encephalopathy; bovine spongiform encephalopathy;
KW TSE; BSE; Gerstmann-Strausler-Scheinker syndrome; GSS; Alpers syndrome;
KW fatal familial insomnia; FFI; kuru; neurodegenerative disease; neurotropic;
KW Alzheimer's disease; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200293164-A2.
XX
PD 21-NOV-2002.
XX
PF 16-MAY-2002; 2002WO-BP005420.
XX
PR 16-MAY-2001; 2001EP-00111858.
PR 29-MAY-2001; 2001US-0293528P.
PR 13-JUL-2001; 2001EP-00117113.
PR 18-JUL-2001; 2001US-0305898P.
XX
PA (AXXI-) AXXIMA PHARM AG.
XX
PI Stein-Gerlach M, Salassidis K, Bacher G, Mueller S;
XX WPI; 2003-120714/11.
XX
PT New pyridylpyrimidine derivatives useful in the treatment or prevention
PT of infectious disease e.g. Kuru syndrome and Creutzfeld-Jacob disease
PT (CJD).
XX
PS Example; Page 38; 96pp; English.
XX
CC The invention relates to novel pyridylpyrimidine derivatives and methods
CC of detecting prion infections and/or prion disease in an individual or in
CC cells, cell cultures and/or cell lysates. The method involves adding at
CC least one monoclonal or polyclonal antibody, oligonucleotide or pyridyl-
CC pyrimidine derivative to the sample or in cells, cell cultures and/or
CC cell lysates and detecting the activity of at least one human cellular
CC protein kinases (e.g., FGF-R1 (also known as flg, Flt-1, Flt-2, b-FGFR),
CC Tkt (also known as CCK-2, DDR-2 or EDDR; EC number 2.7.1.112), Abl (also
CC known as c-abl), ckl, MKK7 (also known as SAPK1a, SAPKalpha), CDC2 (also
CC known as CDK1), PKK), human cellular protein phosphatases such as PTP-SL
CC (also known as MCP83) and PTP-zeta, the cellular signal transduction
CC molecules HSP80 and GPR-1. The invention is useful for regulating the
CC production of prions in cells and in the manufacture of pharmaceutical
CC composition for prophylaxis and/or treatment of infectious disease (e.g.
CC scrapie, chronic wasting disease (CWD), transmissible mink encephalopathy
CC (TME), Creutzfeld-Jacob disease (CJD), bovine spongiform encephalopathy
CC (BSE), variant CJD, Gerstmann-Strausler-Scheinker syndrome (GSS), fatal
CC familial insomnia (FFI), Kuru and Alpers syndrome, especially BSE, CJD,
CC

CC vCJD) or neurodegenerative diseases (e.g., Alzheimer's disease) in humans
 CC or ruminants. The present DNA sequence is a primer used to prepare
 CC radioactively labelled cDNA probes from RNA. This sequence is used in the
 CC exemplification of the invention

XX Sequence 18 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 2 Other;
 SQ

Query Match 0.6%; Score 16; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724

Db 16 AAAAAAAAAAAAAA 1

RESULT 1494

ADL95318/c

ID ADL95318 standard; DNA; 18 BP.

XX

AC ADL95318;

XX

DT 01-JUL-2004 (first entry)

XX

DE Anti-proliferative oligonucleotide #9.

XX

ss; anti-proliferative; cellular proliferation; restenosis; angioplasty;
 KW cancer; malignant tumour.

XX

OS Synthetic.

XX

PH Key Location/Qualifiers

FT modified_base 8

FT /*tag= a

FT /mod_base= OTHER

FT /note= "Optionally 32-P labelled"

XX

PN US2004067197-A1.

XX

PD 08-APR-2004.

XX

PF 02-FEB-2001; 2001US-00775479.

XX

PR 26-NOV-1997; 97WO-CA000892.

XX

PR 24-MAY-1999; 99US-00318106.

XX

PA (LECL/) LECLERC G.

XX

PA (MART/) MARTEL R.

XX

PI Leclerc G, Martel R;

XX

PP WPI; 2004-314974/29.

XX

PT New anti-proliferative substance comprising a radiolabeled DNA carrier,

PT useful for preventing or treating uncontrolled cellular proliferation

PT e.g. restenosis, cancer or malignant tumors.

XX

XX Claim 13; SEQ ID NO 9; 28pp; English.

PS

CC The invention relates to an anti-proliferative substance for preventing

CC uncontrolled cellular proliferation comprising a radiolabelled DNA

CC carrier, where a radioisotope is located internally within the DNA

CC sequence, at 5' end or at 3' end, and the radiolabelled DNA carrier

CC penetrates the cell membrane and is retained intracellularly for a time

CC sufficient for the radio-isotope to effect a dose therapy. The carrier in

CC the anti-proliferative substance is an oligonucleotide, which is linear

CC or a plasmid, which is circular. The plasmid is of viral or bacterial

CC origin. The oligonucleotide is a double- or a single-stranded DNA

CC sequence, which is conjugated with an antibody for cell-specific

CC delivery. The oligonucleotide is also conjugated to a stent surface,

CC cholesterol, oleic acid, linoleic acid, TGFAIpha, antibody, TGFbeta,

CC cytokines or growth factors. The anti-proliferative substance is useful

CC for preventing or treating uncontrolled cellular proliferation. The

CC uncontrolled cell proliferation is a restenosis following angioplasty, or
 CC cancer or a malignant tumour. The present sequence represents an
 CC oligonucleotide carrier used in the invention.

XX Sequence 18 BP; 3 A; 0 C; 0 G; 15 T; 0 U; 0 Other;
 SQ

Query Match 0.6%; Score 16; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAA 2723

Db 16 TAAAAAAAAAAAAA 1

RESULT 1495

AEC52473

ID AEC52473 standard; DNA; 18 BP.

XX

AC AEC52473;

XX

DT 17-NOV-2005 (first entry)

XX

DE Antisense oligonucleotide targeting human TGF-beta-3 #871.

XX

KW Transforming growth factor beta; TGF-beta-3; antisense therapy;

XX

KW antisense oligonucleotide; ss; cancer; cytostatic.

XX

OS Homo sapiens.

XX

PN WO2005084712-A2.

XX

PD 15-SEP-2005.

XX

PF 28-FEB-2005; 2005WO-EP002101.

XX

PR 27-FEB-2004; 2004EP-00004478.

XX

PR 01-APR-2004; 2004US-0558135P.

XX

XX (ANTI-) ANTISENSE PHARMA GMBH.

XX

XX Schlingensiepen K, Schlingensiepen R, Jachimczak P, Stauder G;

XX

XX Bischof A, Hafner M, Egger T;

XX

XX WPI; 2005-630685/64.

XX

PT New antisense oligonucleotides inhibiting the synthesis of proteins

PT involved in the formation of metastases such as transforming growth

PT factor-beta 1 (TGF-beta 1), TGF-beta 2 and TGF-beta 3, useful for

PT treating cancer.

XX

XX Claim 4; Page 71; 106pp; English.

XX

CC The invention relates to an antisense oligonucleotide or its active

CC derivative selected from AEC46374-AEC46395, targeting human interleukin-

CC 10 (IL-10). Also included are a process of manufacturing the antisense

CC oligonucleotide (or its active derivative, by adding consecutive

CC nucleosides and linker stepwise or by cutting the oligonucleotide out of

CC longer oligonucleotide chain), a pharmaceutical composition comprising

CC the antisense oligonucleotide and a TGF-beta 2 antagonist for preparing a

CC composition for treating cancer. The oligonucleotide is an antisense

CC oligonucleotide inhibiting the synthesis of proteins involved in the

CC formation of metastases. The oligonucleotide is an antisense

CC oligonucleotide inhibiting the production of transforming growth factor

CC (TGF)-beta 1, TGF-beta 2, TGF-beta 3, cell-cell adhesion molecules

CC (CAMs), integrins, selectins, metalloproteases (MMPs), their tissue

CC inhibitors (TIMPs) and/or interleukins 10. The oligonucleotides are

CC useful for the preparation of a pharmaceutical composition for inhibiting

CC the formation of metastases in cancer treatment. The oligonucleotides are

CC useful for treating cancer, e.g. bile duct carcinoma, bladder carcinoma,

CC brain tumor, breast cancer, bronchogenic carcinoma, carcinoma of the

CC kidney, cervical cancer, choriocarcinoma, cystadenocarcinoma, cervical

CC carcinoma, colon carcinoma, colorectal carcinoma, embryonal carcinoma,

CC endometrial cancer, epithelial carcinoma, esophageal cancer, gall bladder
 CC cancer, gastric cancer, head and neck cancer, hepatocellular cancer,
 CC liver carcinoma, lung carcinoma, medullary carcinoma, non-small cell
 CC bronchogenic/lung carcinoma, ovarian cancer, pancreas carcinoma,
 CC papillary carcinoma, papillary adenocarcinoma, prostate cancer, small
 CC intestine carcinoma, rectal cancer, renal cell carcinoma, sebaceous gland
 CC carcinoma, skin cancer, soft tissue cancer, squamous cell carcinoma,
 CC testicular carcinoma, uterine cancer, acoustic neuromas, neurofibromas,
 CC trachomas, and pyogenic granulomas; pre-malignant tumors, blastoma,
 CC Ewing's tumor, craniopharyngioma, ependymoma, medulloblastoma,
 CC neurofibroma, pinealoma, retinoblastoma, sarcoma, seminoma, trachomas,
 CC Wilms' tumor and/or myeloma, multiple. The present sequence is an
 CC antisense oligonucleotide targeting human TGF-beta-3.

XX
 SQ Sequence 18 BP; 15 A; 0 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 1.1e+03; Indels 0; Gaps 0;
 Matches 16; Conservative 0; Mismatches 0;

QY 2708 TAAAAA AAAAAAAAAA 2723

Db 1 TAAAAA AAAAAAAAAA 16

RESULT 1496

AEC52193

ID AEC52193 standard; DNA; 18 BP.

XX

AC AEC52193;

XX

DT 17-NOV-2005 (first entry)

XX

DE Antisense oligonucleotide targeting human TGF-beta-3 #591.

XX

KW Transforming growth factor beta; TGF-beta-3; antisense therapy;

XX

KW antisense oligonucleotide; ss; cancer; cytostatic.

XX

OS Homo sapiens.

XX

FN WO2005084712-A2.

XX

PD 15-SEP-2005.

XX

PF 28-FEB-2005; 2005WO-EP002101.

XX

PR 27-FEB-2004; 2004EP-00004478.

XX

PR 01-APR-2004; 2004US-0558135P.

XX

PA (ANTI-) ANTISENSE PHARMA GMBH.

XX

PI Schlingensiepen K, Schlingensiepen R, Jachimczak P, Stauder G;

XX

PI Bischof A, Hafner M, Egger T;

XX

XX WPI; 2005-630685/64.

DR

XX New antisense oligonucleotides inhibiting the synthesis of proteins

XX

PT involved in the formation of metastases such as transforming growth

XX

PT factor-beta 1 (TGF-beta 1), TGF-beta 2 and TGF-beta 3, useful for

XX

PT treating cancer.

XX

PS Claim 4; Page 71; 106pp; English.

XX

XX The invention relates to an antisense oligonucleotide or its active

CC

CC derivative selected from AEC46374-AEC48395, targeting human interleukin-

CC

CC 10 (IL-10). Also included are a process of manufacturing the antisense

CC

CC oligonucleotide (or its active derivative, by adding consecutive

CC

CC nucleosides and linker stepwise or by cutting the oligonucleotide out of

CC

CC longer oligonucleotide chain), a pharmaceutical composition comprising

CC

CC the antisense oligonucleotide and a TGF-beta 2 antagonist for preparing a

CC

CC composition for treating cancer. The oligonucleotide is an antisense

CC

CC oligonucleotide inhibiting the synthesis of proteins involved in the

CC

CC formation of metastases. The oligonucleotide is an antisense
 CC oligonucleotide inhibiting the production of transforming growth factor
 CC (TGF)-beta 1, TGF-beta 2, TGF-beta 3, cell-cell adhesion molecules
 CC (CAMs), integrins, selectins, metalloproteases (MMPs), their tissue
 CC inhibitors (TIMPs) and/or interleukins 10. The oligonucleotides are
 CC useful for the preparation of a pharmaceutical composition for inhibiting
 CC the formation of metastases in cancer treatment. The oligonucleotides are
 CC useful for treating cancer, e.g. bile duct carcinoma, bladder carcinoma,
 CC brain tumor, breast cancer, bronchogenic carcinoma, carcinoma of the
 CC kidney, cervical cancer, choriocarcinoma, cystadenocarcinoma, cervical
 CC carcinoma, colon carcinoma, colorectal carcinoma, embryonal carcinoma,
 CC endometrial cancer, epithelial carcinoma, esophageal cancer, gall bladder
 CC cancer, gastric cancer, head and neck cancer, hepatocellular cancer,
 CC liver carcinoma, lung carcinoma, medullary carcinoma, non-small cell
 CC bronchogenic/lung carcinoma, ovarian cancer, pancreas carcinoma,
 CC papillary carcinoma, papillary adenocarcinoma, prostate cancer, small
 CC intestine carcinoma, rectal cancer, renal cell carcinoma, sebaceous gland
 CC carcinoma, skin cancer, soft tissue cancer, squamous cell carcinoma,
 CC testicular carcinoma, uterine cancer, acoustic neuromas, neurofibromas,
 CC trachomas, and pyogenic granulomas; pre-malignant tumors, blastoma,
 CC Ewing's tumor, craniopharyngioma, ependymoma, medulloblastoma,
 CC hemangioblastoma, medulloblastoma, melanoma, mesothelioma, neuroblastoma,
 CC neurofibroma, pinealoma, retinoblastoma, sarcoma, seminoma, trachomas,
 CC Wilms' tumor and/or myeloma, multiple. The present sequence is an
 CC antisense oligonucleotide targeting human TGF-beta-3.

XX
 SQ Sequence 18 BP; 15 A; 0 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 18;

Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAA AAAAAAAAAA 2723

Db 3 TAAAAA AAAAAAAAAA 18

RESULT 1497

AEC52333

ID AEC52333 standard; DNA; 18 BP.

XX

AC AEC52333;

XX

DT 17-NOV-2005 (first entry)

XX

DE Antisense oligonucleotide targeting human TGF-beta-3 #731.

XX

KW Transforming growth factor beta; TGF-beta-3; antisense therapy;

XX

KW antisense oligonucleotide; ss; cancer; cytostatic.

XX

OS Homo sapiens.

XX

XX WO2005084712-A2.

XX

PD 15-SEP-2005.

XX

XX 28-FEB-2005; 2005WO-EP002101.

XX

PR 27-FEB-2004; 2004EP-00004478.

XX

PR 01-APR-2004; 2004US-0558135P.

XX

XX (ANTI-) ANTISENSE PHARMA GMBH.

XX

PI Schlingensiepen K, Schlingensiepen R, Jachimczak P, Stauder G;

XX

PI Bischof A, Hafner M, Egger T;

XX

XX WPI; 2005-630685/64.

DR

XX New antisense oligonucleotides inhibiting the synthesis of proteins

XX

CC involved in the formation of metastases such as transforming growth

XX

CC factor-beta 1 (TGF-beta 1), TGF-beta 2 and TGF-beta 3, useful for

XX

CC treating cancer.

XX

PS Claim 4; Page 71; 106pp; English.

XX The invention relates to an antisense oligonucleotide or its active derivative selected from AEC46374-AEC46395, targeting human interleukin-10 (IL-10). Also included are a process of manufacturing the antisense oligonucleotide (or its active derivative, by adding consecutive nucleosides and linker stepwise or by cutting the oligonucleotide out of longer oligonucleotide chain), a pharmaceutical composition comprising the antisense oligonucleotide and a TGF-beta 2 antagonist for preparing a composition for treating cancer. The oligonucleotide is an antisense oligonucleotide inhibiting the synthesis of proteins involved in the formation of metastases. The oligonucleotide is an antisense oligonucleotide inhibiting the production of transforming growth factor (TGF)-beta 1, TGF-beta 2, TGF-beta 3, cell-cell adhesion molecules (CAMs), integrins, selectins, metalloproteinases (MMPs), their tissue inhibitors (TIMPs) and/or interleukins 10. The oligonucleotides are useful for the preparation of a pharmaceutical composition for inhibiting the formation of metastases in cancer treatment. The oligonucleotides are useful for treating cancer, e.g. bile duct carcinoma, bladder carcinoma, brain tumor, breast cancer, bronchogenic carcinoma, carcinoma of the kidney, cervical cancer, choriocarcinoma, cystadenocarcinoma, cervical carcinoma, colon carcinoma, colorectal carcinoma, embryonal carcinoma, endometrial cancer, epithelial carcinoma, esophageal cancer, gall bladder cancer, gastric cancer, head and neck cancer, hepatocellular cancer, liver carcinoma, lung carcinoma, medullary carcinoma, non-small cell bronchogenic/lung carcinoma, ovarian cancer, pancreas carcinoma, papillary carcinoma, papillary adenocarcinoma, prostate cancer, small intestine carcinoma, rectal cancer, renal cell carcinoma, sebaceous gland carcinoma, skin cancer, soft tissue cancer, squamous cell carcinoma, testicular carcinoma, uterine cancer, acoustic neuromas, neurofibromas, trachomas, and pyogenic granulomas; pre-malignant tumors, blastoma, Ewing's tumor, craniopharyngioma, ependymoma, medulloblastoma, hemangioblastoma, medulloblastoma, melanoma, mesothelioma, neuroblastoma, neurofibroma, pinealoma, retinoblastoma, sarcoma, seminoma, trachomas, Wilms tumor and/or myeloma, multiple. The present sequence is an antisense oligonucleotide targeting human TGF-beta-3.

XX Sequence 18 BP; 15 A; 0 C; 0 G; 3 T; 0 U; 0 Other;

SQ Query Match 0.6%; Score 16; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2723
Db 2 TAAAAAAAAAAAAAAAAA 17

RESULT 1498
ADK70862
ID ADK70862 standard; DNA; 19 BP.
XX AC ADK70862;
XX DT 06-MAY-2004 (first entry)
DE 5' mRNA DNA preparation method related tag DNA sequence #30.
XX DNA preparation; 5' mRNA; linker synthesis; primer synthesis;
KW gene regulation; gene expression; ss; tag.
XX Unidentified.
OS
XX WO2003106672-A2.
XX 24-DEC-2003.
XX 12-JUN-2003; 2003WO-JP007514.
XX 12-JUN-2002; 2002JP-00171851.
PR 12-AUG-2002; 2002JP-00235294.
XX (RIKE) RIKEN KK.

PA (DNAF-) DNAFORM KK.
XX Hayashizaki Y, Carninci P, Harbers MT;
XX WPI; 2004-082194/08.
XX Preparing DNA fragment corresponding to nucleotide sequence of 5' end region of mRNA, by preparing nucleic acid corresponding to nucleotide sequence of 5' end of mRNA, cleaving nucleic acid with restriction enzyme.
XX Example 5; SEQ ID NO 62; 121pp; English.
XX The invention comprises a method for preparing a DNA fragment corresponding to a nucleotide sequence of a 5' end of an mRNA. The method is useful for synthesizing a nucleotide sequence to be used as a linker or primer and selectively collecting multiple nucleic acid fragments containing information on the nucleotide sequences at the 5' end of multiple mRNA in a sample. The method is also useful for identifying regions in the genome, which are required for gene regulation and gene expression. The present DNA sequence was used in an example of the invention.
XX Sequence 19 BP; 16 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 16; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2724
Db 2 AAAAAAAAAAAAAAAAAA 17

RESULT 1499
ADR81681/C
ID ADR81681 standard; DNA; 19 BP.
XX AC ADR81681;
XX DT 16-DEC-2004 (first entry)
DE Hepatitis C virus (HCV) oligonucleotide seqid 6180.
XX antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; hepatitis C virus; HCV; ss.
XX Hepatitis C virus.
OS
XX WO2004080406-A2.
XX 23-SEP-2004.
XX 08-MAR-2004; 2004WO-US007070.
XX 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 14-APR-2003; 2003US-0455050P.
PR 17-APR-2003; 2003US-0462894P.
PR 25-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-046565P.
PR 09-MAY-2003; 2003US-0465802P.
PR 08-AUG-2003; 2003US-0469612P.
PR 11-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.

PR 26-SEP-2003; 2003US-0506341P.
 PR 09-OCT-2003; 2003US-0510246P.
 PR 10-OCT-2003; 2003US-0510318P.
 PR 07-NOV-2003; 2003US-0518453P.
 XX (ALNY-) ALNYLAM PHARM.
 XX PA
 XX PI Manoharan M, Bumrot D;
 XX DR WPI; 2004-677362/66.
 XX
 XX Interference RNA agent useful for treating dyslipidemias, coronary artery
 PT disease, diabetes, cancer or neurological disease, comprises sense
 PT sequence and antisense sequence which has specific modifications.
 XX
 PS Example 5; SEQ ID NO 6180; 378pp; English.
 XX
 CC The invention describes a RNA interference (iRNA) agent (I) comprising a
 CC sense sequence and an antisense sequence, where the sense sequences have
 CC one or more asymmetrical 2'-O alkyl modifications, the antisense
 CC sequences have one or more asymmetrical phosphorothioate modifications
 CC and the antisense sequence targets a human gene sequence. Also described
 CC are a pharmaceutical preparation comprising (I); reducing (M1) apoB-100
 CC levels or glucose-6-phosphatase levels in a subject; producing (I);
 CC stabilising (I), involves selecting a sequence with activity and
 CC introducing one or more asymmetrical modification in the sequence, where
 CC the modification decreases nuclease sensitivity while not decreasing its
 CC activity; a kit comprising (I) and instructions for its use; and a device
 CC that can be dispense or administer a composition comprising (I). (I) is
 CC useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (M1)
 CC is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
 CC The subject is suffering from a disorder characterised by elevated or
 CC otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
 CC levels of cholesterol, and/or dysregulation of lipid metabolism. The
 CC disorder is chosen from the HDL/LDL cholesterol imbalance,
 CC dyslipidaemias, hypercholesterolaemia, statin-resistant
 CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
 CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
 CC inhibit hepatic glucose production or for treating glucose-metabolism-
 CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
 CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
 CC lung cancer), neurological disease (e.g., Huntington disease or
 CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
 CC represents a hepatitis C virus (HCV) antisense oligonucleotide that can
 CC be used to control HCV gene expression.
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAA 2724
 Db |||||
 19 AAAAAAAAAAAAAA 4
 RESULT 1500
 ID ADT86138/c
 XX ADT86138 standard; DNA; 19 BP.
 XX AC ADT86138;
 XX
 DT 13-JAN-2005 (first entry)
 XX
 DE Hepatitis C virus (HCV) antisense inhibition target seqid 6180.
 XX
 KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
 KW interference RNA; iRNA; cholesterol moiety; apoB; glucose-6-phosphatase;
 KW lipid metabolism; cholesterol imbalance; dyslipidaemia;
 KW familial combined hyperlipidaemia; acquired hyperlipidaemia;
 KW hypercholesterolaemia; statin-resistant hypercholesterolaemia;
 KW coronary artery disease; coronary heart disease; atherosclerosis;

KW hepatic glucose production; glucose-metabolism-related disorder;
 KW type-2 diabetes; glitaxzone-resistant diabetes; HCV; hepatitis C virus;
 XX antisense inhibition; ss.
 OS Hepatitis C virus.
 XX
 FN WO2004091515-A2.
 XX
 PD 28-OCT-2004.
 XX
 PF 09-APR-2004; 2004WO-US011255.
 XX
 PR 09-APR-2003; 2003US-0462097P.
 PR 10-APR-2003; 2003US-0461915P.
 PR 14-APR-2003; 2003US-0462894P.
 PR 17-APR-2003; 2003US-0463772P.
 PR 25-APR-2003; 2003US-0465665P.
 PR 25-APR-2003; 2003US-0465802P.
 PR 09-MAY-2003; 2003US-0469612P.
 PR 08-AUG-2003; 2003US-0493986P.
 PR 11-AUG-2003; 2003US-0494597P.
 PR 26-SEP-2003; 2003US-0506341P.
 PR 09-OCT-2003; 2003US-0510246P.
 PR 10-OCT-2003; 2003US-0510318P.
 PR 07-NOV-2003; 2003US-0518453P.
 PR 08-MAR-2004; 2004WO-US007070.
 PR 05-APR-2004; 2004WO-US010586.
 XX (ALNY-) ALNYLAM PHARM INC.
 XX
 PI Manoharan M, Elbashir S, Harborth J;
 XX
 DR WPI; 2004-766693/75.
 XX
 PT New interference RNA agent comprising sense sequence and antisense
 PT sequence having cholesterol moieties, useful for reducing apoB-100 levels
 XX or glucose-6-phosphatase levels.
 XX
 XX Example 4; SEQ ID NO 6180; 324pp; English.
 CC
 CC The invention describes an interference RNA (iRNA) agent (I) comprising a
 CC sense sequence and an antisense sequence, where the sense sequence
 CC comprises one or more cholesterol moieties, and the antisense sequence
 CC targets a human gene sequence. The following are disclosed: a
 CC pharmaceutical composition comprising (I); and a device for administering
 CC (I) into a patient. (I) is useful for reducing apoB-100 levels or glucose
 CC -6-phosphatase levels in a subject. (I) targets a sequence identical to
 CC any one of sequences as given in the specification. (I) comprises a
 CC cholesterol moiety. The cholesterol moiety is coupled to a sense strand.
 CC (I) further comprises a second cholesterol moiety. The second cholesterol
 CC moiety is coupled to a sense strand. (I) has 21 or more nucleotides. The
 CC duplex region of (I) is 19 nucleotides in length. The subject is
 CC suffering from a disorder having elevated or otherwise unwanted
 CC expression of apo-B-100, elevated or otherwise unwanted levels of
 CC cholesterol, and/or dysregulation of lipid metabolism. The disorder is
 CC chosen from HDL/LDL cholesterol imbalance, dyslipidaemia (e.g., familial
 CC combined hyperlipidaemia or acquired hyperlipidaemia),
 CC hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary
 CC artery disease, coronary heart disease and atherosclerosis, preferably
 CC statin-resistant hypercholesterolaemia. (I) is administered to a subject
 CC to inhibit hepatic glucose production or for treating glucose-metabolism-
 CC related disorders e.g., type-2 diabetes or glitaxzone-resistant diabetes.
 CC (I) has endonuclease or exonuclease resistance. This sequence represents
 CC a human hepatitis C virus (HCV) pallindromic sequence that may be useful
 CC as a target for antisense inhibition of HCV in human liver cells.
 XX
 SQ Sequence 19 BP; 0 A; 0 C; 2 G; 17 T; 0 U; 0 Other;
 Query Match 0.6%; Score 16; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2724

```
Db          |||||||
19 AAAAAAAAAAAAAA 4

RESULT 1501
AEA99200/c  ID AEA99200 standard; RNA; 19 BP.
XX
XX AC AEA99200;
XX
XX DT 11-AUG-2005 (first entry)
XX
XX DE Human Fas and FasL genes lower siRNA sequence SEQ ID NO:300.
XX
XX KW spinal cord injury; short interfering RNA; siRNA; RNA interference;
XX KW gene silencing; RNA cleavage; Fas; vulnery; ds.
XX
XX OS Homo sapiens.
XX OS Synthetic.
XX
XX PN US2005119212-A1.
XX
XX PD 02-JUN-2005.
XX
XX PF 18-JUN-2004; 2004US-00871222.
XX
XX PR 18-MAY-2001; 2001US-0292217P.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 06-MAR-2002; 2002US-0362016P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 20-MAY-2002; 2002WO-US015876.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PR 20-FEB-2003; 2003WO-US005028.
XX PR 30-APR-2003; 2003US-00427160.
XX PR 23-MAY-2003; 2003US-0044853.
XX PR 23-OCT-2003; 2003US-00693059.
XX PR 24-NOV-2003; 2003US-00720448.
XX PR 03-DEC-2003; 2003US-00727780.
XX PR 14-JAN-2004; 2004US-00757803.
XX PR 10-FEB-2004; 2004US-0543480P.
XX PR 13-FEB-2004; 2004US-00780447.
XX PR 16-APR-2004; 2004US-00826966.
XX PR 30-APR-2004; 2004WO-US013456.
XX PR 24-MAY-2004; 2004WO-US016390.
XX
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX PI Haerberli P, Mcswiggen J;
XX
XX DR WPI; 2005-494870/50.
XX
XX PT Treating spinal cord injury in subject, involves administering to
XX PT subject, short interfering nucleic acid directing cleavage of Fas RNA
XX PT through RNA interference under conditions suitable to modulate expression
XX PT of Fas in subject.
XX
XX PS Claim 33; SEQ ID NO 300; 98pp; English.
XX
XX CC The invention relates to a method (M1) for treating spinal cord injury in
XX CC a subject. (M1) involves administering to the subject, a short
XX CC interfering nucleic acid (siNA) molecule (I) that directs cleavage of a
XX CC Fas RNA through RNA interference (RNAi) under conditions suitable to
XX CC modulate the expression of Fas in the subject. Also described: (1) an
XX CC expression vector comprising (1); (2) a kit comprising (1); (3) a human
XX CC cell comprising (1); (4) a pharmaceutical composition comprising (1); and
XX CC (5) a method of synthesizing (1). The present sequence represents a human
XX CC Fas gene and Fas ligand (FasL) lower (antisense) siRNA oligonucleotide,
XX CC which is used in the exemplification of the present invention.
```

```
XX
SQ Sequence 19 BP; 2 A; 2 C; 0 G; 0 T; 15 U; 0 Other;

Query Match      0.6%; Score 16; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2723
DB 16 TAAAAAAAAAAAAAAAAA 1

RESULT 1502
AEA99050
ID AEA99050 standard; RNA; 19 BP.
XX
XX AC AEA99050;
XX
XX DT 11-AUG-2005 (first entry)
XX
XX DE Human Fas and FasL genes target and upper siRNA SEQ ID NO:150.
XX
XX KW spinal cord injury; short interfering RNA; siRNA; RNA interference;
XX KW gene silencing; RNA cleavage; Fas; vulnery; ds.
XX
XX OS Homo sapiens.
XX
XX PN US2005119212-A1.
XX
XX PD 02-JUN-2005.
XX
XX PF 18-JUN-2004; 2004US-00871222.
XX
XX PR 18-MAY-2001; 2001US-0292217P.
XX PR 20-FEB-2002; 2002US-0358580P.
XX PR 06-MAR-2002; 2002US-0362016P.
XX PR 11-MAR-2002; 2002US-0363124P.
XX PR 20-MAY-2002; 2002WO-US015876.
XX PR 06-JUN-2002; 2002US-0386782P.
XX PR 29-AUG-2002; 2002US-0406784P.
XX PR 05-SEP-2002; 2002US-0408378P.
XX PR 09-SEP-2002; 2002US-0409293P.
XX PR 15-JAN-2003; 2003US-0440129P.
XX PR 20-FEB-2003; 2003WO-US005028.
XX PR 30-APR-2003; 2003US-00427160.
XX PR 23-MAY-2003; 2003US-0044853.
XX PR 23-OCT-2003; 2003US-00693059.
XX PR 24-NOV-2003; 2003US-00720448.
XX PR 03-DEC-2003; 2003US-00727780.
XX PR 14-JAN-2004; 2004US-00757803.
XX PR 10-FEB-2004; 2004US-0543480P.
XX PR 13-FEB-2004; 2004US-00780447.
XX PR 16-APR-2004; 2004US-00826966.
XX PR 30-APR-2004; 2004WO-US013456.
XX PR 24-MAY-2004; 2004WO-US016390.
XX
XX PA (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX PI Haerberli P, Mcswiggen J;
XX
XX DR WPI; 2005-494870/50.
XX
XX PT Treating spinal cord injury in subject, involves administering to
XX PT subject, short interfering nucleic acid directing cleavage of Fas RNA
XX PT through RNA interference under conditions suitable to modulate expression
XX PT of Fas in subject.
XX
XX PS Claim 33; SEQ ID NO 150; 98pp; English.
XX
XX CC The invention relates to a method (M1) for treating spinal cord injury in
XX CC a subject. (M1) involves administering to the subject, a short
XX CC interfering nucleic acid (siNA) molecule (I) that directs cleavage of a
XX CC Fas RNA through RNA interference (RNAi) under conditions suitable to
XX CC modulate the expression of Fas in the subject. Also described: (1) an
XX CC expression vector comprising (1); (2) a kit comprising (1); (3) a human
XX CC cell comprising (1); (4) a pharmaceutical composition comprising (1); and
XX CC (5) a method of synthesizing (1). The present sequence represents a human
XX CC Fas gene and Fas ligand (FasL) lower (antisense) siRNA oligonucleotide,
XX CC which is used in the exemplification of the present invention.
```

CC Fas RNA through RNA interference (RNAi) under conditions suitable to
 CC modulate the expression of Fas in the subject. Also described: (1) an
 CC expression vector comprising (i); (2) a kit comprising (i); (3) a human
 CC cell comprising (i); (4) a pharmaceutical composition comprising (i); and
 CC (5) a method of synthesizing (i). The present sequence represents a human
 CC Fas gene and Fas ligand (FasL) target and upper (sense) siRNA
 CC oligonucleotide, which is used in the exemplification of the present
 CC invention.

XX SQ Sequence 19 BP; 15 A; 0 C; 2 G; 0 T; 2 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 19;

Best Local Similarity 93.8%; Pred. No. 1.2e+03;

Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAATAAAAAAAAAA 2723

Db 4 UAAAAAAAAAAAAAAAAA 19

RESULT 1503

AEE32216

ID AEE32216 standard; RNA; 19 BP.

XX AC AEE32216;

XX AC AEE32216;

XX DT 09-FEB-2006 (first entry)

XX DE Human ICAM1 siRNA lower strand SEQ ID 328.

XX RNA interference; gene silencing; siRNA; short interfering RNA; ss;
 KW intercellular adhesion molecule 1; ICAM1; CNS-Gen.; Neuroprotective;
 KW Nootropic; antiinflammatory; Antiarthritic; Antirheumatic; Antidiabetic;
 KW Gastrointestinal-Gen.; Dermatological; Immunosuppressive; Antidiabetic;
 KW Cytostatic; Cerebroprotective; Respiratory-Gen.; Hypotensive;
 KW inflammation; rheumatoid arthritis; inflammatory bowel disease;
 KW atopic dermatitis; asthma; autoimmune disease; multiple sclerosis;
 KW Crohns disease; diabetes mellitus; cancer; hyperproliferation;
 KW neurological disease; Alzheimers disease; brain injury; myopathy;
 KW respiratory disease; chronic obstructive pulmonary disease;
 KW pulmonary hypertension; emphysema; muscular-gen.

XX Homo sapiens.

XX WO2005045039-A2.

XX 19-MAY-2005.

XX 20-AUG-2004; 2004WO-US027366.

XX 23-OCT-2003; 2003US-00693059.

XX 24-NOV-2003; 2003US-00720448.

XX 03-DEC-2003; 2003US-00727780.

XX 14-JAN-2004; 2004US-00757803.

XX 10-FEB-2004; 2004US-0543480P.

XX 13-FEB-2004; 2004US-00780447.

XX 15-MAR-2004; 2004US-00800487.

XX 16-APR-2004; 2004US-00826966.

XX 30-APR-2004; 2004WO-US013456.

XX 24-MAY-2004; 2004WO-US016390.

XX (STRN-) SIRNA THERAPEUTICS INC.

XX Richards I, Mcswiggen J;

XX WI; 2005-746893/76.

XX Novel chemically synthesized double-stranded short interfering nucleic
 PT acid molecule directing cleavage of intracellular adhesion molecule RNA
 PT through RNA interference, useful for treating diseases e.g. cancer and
 PT inflammation.

XX Claim 33; SEQ ID NO 328; 200pp; English.

XX

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SQ

Query Match

Best Local Similarity

Matches

QY

Db

RESULT 1504

AEE32050/c

ID AEE32050 standard; RNA; 19 BP.

XX AC AEE32050;

XX AC AEE32050;

XX DT 09-FEB-2006 (first entry)

XX DE Human ICAM1 siRNA lower strand SEQ ID 162.

XX RNA interference; gene silencing; siRNA; short interfering RNA; ss;

KW intercellular adhesion molecule 1; ICAM1; CNS-Gen.; Neuroprotective;

KW Nootropic; antiinflammatory; Antiarthritic; Antirheumatic; Antidiabetic;

KW Gastrointestinal-Gen.; Dermatological; Immunosuppressive; Antidiabetic;

KW Cytostatic; Cerebroprotective; Respiratory-Gen.; Hypotensive;

KW inflammation; rheumatoid arthritis; inflammatory bowel disease;

KW atopic dermatitis; asthma; autoimmune disease; multiple sclerosis;

KW Crohns disease; diabetes mellitus; cancer; hyperproliferation;

KW neurological disease; Alzheimers disease; brain injury; myopathy;

KW respiratory disease; chronic obstructive pulmonary disease;

KW pulmonary hypertension; emphysema; muscular-gen.

XX Homo sapiens.

XX WO2005045039-A2.

XX 19-MAY-2005.

XX 20-AUG-2004; 2004WO-US027366.

XX 23-OCT-2003; 2003US-00693059.

XX 24-NOV-2003; 2003US-00720448.

XX 03-DEC-2003; 2003US-00727780.

XX 14-JAN-2004; 2004US-00757803.

XX 10-FEB-2004; 2004US-0543480P.

XX 13-FEB-2004; 2004US-00780447.

XX 15-MAR-2004; 2004US-00800487.

XX 16-APR-2004; 2004US-00826966.

XX 30-APR-2004; 2004WO-US013456.

XX 24-MAY-2004; 2004WO-US016390.

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PA (SIRN-) SIRNA THERAPEUTICS INC.
XX
PI Richards I, Mcswiggen J;
XX WPI; 2005-746893/76.
DR
XX
XX
XX Novel chemically synthesized double-stranded short interfering nucleic
PT acid molecule directing cleavage of intracellular adhesion molecule RNA
PT through RNA interference, useful for treating diseases e.g. cancer and
PT inflammation.
XX
XX Claim 33; SEQ ID NO 162; 200pp; English.
XX
XX The invention relates to a chemically synthesized double-stranded short
CC interfering nucleic acid (siRNA) molecule directing cleavage of
CC intracellular adhesion molecule (ICAM) RNA through RNA interference
CC (RNAi), where each strand of the molecule is 18-23 nucleotides in length,
CC and one strand of the molecule comprises nucleotide sequence having
CC sufficient complementarity to the ICAM RNA for the siRNA molecule to
CC direct cleavage of the ICAM RNA through RNA. The siRNA is useful for
CC downregulation or inhibition of expression of ICAM gene and for
CC diagnosing, preventing or treating diseases associated with cellular
CC adhesion such as inflammatory disorders e.g. rheumatoid arthritis,
CC inflammatory bowel disease, atopic dermatitis and asthma, autoimmune
CC diseases e.g. multiple sclerosis, Crohn's disease and diabetes mellitus,
CC cancer and proliferative diseases e.g. ovarian cancer, lung cancer, renal
CC cell carcinoma and multiple myeloma, neurological diseases e.g.
CC Alzheimer's disease, brain injury, cerebral atrophy and congenital
CC myopathy, respiratory diseases e.g. chronic obstructive pulmonary
CC disease, pulmonary hypertension and emphysema (many more diseases are
CC given in the specification). The present sequence one strand of an siRNA
CC targeting human ICAM1.
XX
SQ Sequence 19 BP; 1 A; 1 C; 1 G; 0 T; 16 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2724
Db 18 AAAAAAAAAAAAAAAAAA 3

RESULT 1505
AAD33499
ID AAD33499 standard; DNA; 20 BP.
XX
XX AAD33499;
AC
XX
XX 01-JUL-2002 (first entry)
DT
XX
XX T7T18Apad_PS27-20-0003 probe for calibration of molecular array data.
DE
XX
XX Molecular array; probe; ss.
KW
XX
XX Unidentified.
OS
XX
XX EP1186673-A2.
XX
XX EP1186673-A2.
XX
XX 13-MAR-2002.
PD
XX
XX 10-SEP-2001; 2001EP-00307665.
PF
XX
XX 11-SEP-2000; 2000US-00659173.
PR
XX
XX (AGIL-) AGILENT TECHNOLOGIES INC.
PA
XX
XX Wobler PK, Delenstarr GC;
PI
XX
XX WPI; 2002-282886/33.
DR
XX
XX Calibration of molecular array data by employing calibration probes that
PT

PT generate signals proportional to total concentrations of labeled target
PT molecules, and molecular arrays incorporating sets of calibration probes.
XX
XX Disclosure; Page 14; 32pp; English.
XX
XX The invention relates to a method for calibrating data scanned from a
CC molecular array. The method involves employing calibrations of labeled
CC generate signals proportional to the total concentrations of labeled
CC target molecules to which the molecular array probes are directed over an
CC entire range of sample solutions and molecular arrays incorporating sets
CC of calibration probes. Method is useful for calibrating different types
CC of signals scanned from a molecular array, or calibrating signals scanned
CC from different molecular arrays. The present sequence is poly (A)
CC normalisation probe used in calibration of molecular array data
XX
SQ Sequence 20 BP; 16 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 0.6%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2724
Db 1 AAAAAAAAAAAAAAAAAA 16

RESULT 1506
ACA90051
ID ACA90051 standard; DNA; 20 BP.
XX
XX ACA90051;
AC
XX
XX 10-JUL-2003 (first entry)
DT
XX
XX Cardiovascular disease differential gene expression related primer #98.
DE
XX
XX Cardiovascular disease; arteriosclerosis; ischaemia; angina pectoris;
KW myocardial infarction; cardiast; antiarteriosclerotic; antianginal;
KW gene therapy; differential gene expression; PCR; primer; ss.
XX
XX Homo sapiens.
OS
XX
XX WO2003031650-A2.
PN
XX
XX 17-APR-2003.
PD
XX
XX 02-OCT-2002; 2002WO-EP011034.
PF
XX
XX 08-OCT-2001; 2001GB-00024145.
PR
XX
XX (FARB ) BAYER AG.
PA
XX
XX Munnes M, Gehrman M, Wick M, Schmitz G;
PI
XX
XX WPI; 2003-403108/38.
DR
XX
XX Predicting, diagnosing or prognosing a cardiovascular disease, e.g.
PT angina, ischemia, myocardial infarction or arteriosclerosis by detection
PT of a polynucleotide in a biological sample comprises detecting a
PT hybridization complex.
XX
XX Example 3; Page 105; 454pp; English.
PS
XX
XX The invention describes a method of predicting, diagnosing or prognosing
CC a cardiovascular disease by detection of a polynucleotide in a biological
CC sample comprises hybridising at least one of the polynucleotide to a
CC nucleic acid material of a biological sample, thus forming a
CC hybridisation complex, and detecting the hybridisation complex. The
CC polynucleotides, polypeptides, antisense molecule, antibody and reagent
CC are useful for preparing compositions for preventing, predicting or
CC diagnosing, or a medicament for treating a cardiovascular disease, e.g.
CC arteriosclerosis, ischaemia, angina pectoris, or myocardial infarction.
CC This sequence represents a primer used to identify genes differentially

```

CC regulated in individuals with cardiovascular disease

XX Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

SQ Query Match 0.6%; Score 16; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. NO. 1.2e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2076 GAAGTGACAGCTTTGA 2091

DB 4 GAAGTGACAGCTTTGA 19

RESULT 1507

ABZ91658

ID ABZ91658 standard; DNA; 20 BP.

XX AC

XX ABZ91658;

DT 17-OCT-2003 (first entry)

XX DE

DE Human oligonucleotide sequence.

XX KW

KW Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX OS

OS Homo sapiens.

XX PN

PN WO200285308-A2.

XX PD

PD 31-OCT-2002.

XX PF

PF 23-APR-2002; 2002WO-US013135.

XX PR

PR 24-APR-2001; 2001US-0286137P.

XX PA

PA (EPIG-) EPIGENESIS PHARM INC.

XX PI

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX DR

DR WPI; 2003-229219/22.

XX PT

PT Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiquinone.

XX PS

PS Disclosure; SEQ ID NO 6900; 872pp; English.

XX CC

CC The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO

CC

CC at ftp.wipo.int/pub/published_pct_sequences

XX SQ

SQ Sequence 20 BP; 15 A; 1 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. NO. 1.2e+03;

Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAA 2723

DB 5 TAAAAAATAAAAAA 20

RESULT 1508

ABD27888

ID ABD27888 standard; DNA; 20 BP.

XX AC

XX ABD27888;

DT 29-JUL-2004 (first entry)

XX DE

DE AA258396-derived oligonucleotide SEQ ID 6900.

XX KW

KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;

KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;

KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;

KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;

KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;

KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;

KW pulmonary transplantation rejection; ss; primer.

XX OS

OS Homo sapiens.

XX PN

PN WO200285309-A2.

XX PD

PD 31-OCT-2002.

XX PF

PF 23-APR-2002; 2002WO-US013143.

XX PR

PR 24-APR-2001; 2001US-0286036P.

XX PA

PA (EPIG-) EPIGENESIS PHARM INC.

XX PI

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX DR

DR WPI; 2003-093058/08.

XX PT

PT Pharmaceutical composition for treating asthma, has antisense

PT oligonucleotide containing less percentage of adenosine, targeted to

PT nucleic acids associated with lung airway or lung dysfunction, and

PT bronchodilating agent.

XX PS

PS Claim 15; SEQ ID NO 6900; 763pp; English.

XX CC

CC This invention describes a novel composition (a) a first active agent,

CC comprising oligonucleotides, effective for alleviating

CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,

CC surfactant depletion or hyposecretion, when administered to a mammal. The

CC oligonucleotides are derived from a gene encoding or regulating

CC expression of a target polypeptide associated with lung airway or lung

CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.

CC The invention also describes a kit, that comprises: (a) a delivery

CC device, in separate containers, (b) the oligonucleotides, (c)

CC instructions for adding a carrier and for use of the kit. The composition

CC of the invention has antiallergic, antiinflammatory, antiasthmatic,

CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a

CC beta-adrenergic agonist. The composition is useful for preventing or

CC treating a respiratory, lung or malignant disease. The administered

CC composition comprises oligo and is administered to reduce the production

CC or availability, or to increase the degradation of the target mRNA or to

CC reduce the amount of target polypeptide present in the lungs. The
 CC pulmonary obstruction, and/or bronchoconstriction and/or lung
 CC inflammation, allergies and/or surfactant hypoproduction are associated
 CC with a disease or condition such as pulmonary vasoconstriction,
 CC inflammation, allergies, asthma, impeded respiration, respiratory
 CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
 CC transplantation rejection, pulmonary infections, bronchitis or cancer.
 CC The reduced adenosine content of the anti-sense oligos corresponding to
 CC thymidines present in the target RNA serves to prevent the breakdown of
 CC the oligonucleotides into products that free adenosine into the system
 CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
 CC prevent any unwanted effects due to it

XX Sequence 20 BP; 15 A; 1 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2723
 Db 5 TAAAAAATAAAAAAAAAA 20

RESULT 1509
 ADH67050/c
 ID ADH67050 standard; DNA; 20 BP.

AC ADH67050;

XX 25-MAR-2004 (first entry)

DE Human glucocorticoid receptor-specific antisense oligonucleotide #3884.
 XX antisense oligonucleotide; glucocorticoid receptor; infection;
 KW inflammation; tumour formation; diabetes; obesity;
 KW cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
 KW phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.

XX Homo sapiens.

XX WO200309215-A2.

XX 04-DEC-2003.

XX 20-MAY-2003; 2003WO-US016084.

XX 20-MAY-2002; 2002US-0381857P.

XX (PHAA) PHARMACIA CORP.

XX Crosby SD, Naleeth AP;

XX WPI; 2004-035034/03.

XX New antisense compound targeted to a nucleic acid molecule encoding
 PT mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
 PT cardiovascular disorder, hyperlipidemia or Cushing's syndrome.

XX Claim 4; SEQ ID NO 3884; 985pp; English.

XX The invention comprises an antisense oligonucleotides that are targeted
 CC to nucleic acids encoding a mammalian glucocorticoid receptor. The
 CC antisense oligonucleotides of the invention are useful for preventing or
 CC delaying infection, inflammation or tumour formation. The antisense
 CC oligonucleotides are also useful for treating diabetes, obesity, The
 CC cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
 CC present DNA sequence represents an antisense oligonucleotide that targets
 CC the human glucocorticoid receptor gene. NOTE: The present sequence
 CC contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.

XX Sequence 20 BP; 1 A; 1 C; 2 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAATAAAAAAAAAA 2724
 Db 20 AAAAAAATAAAAAAAAAA 5

RESULT 1510
 ADK76466/c
 ID ADK76466 standard; DNA; 20 BP.

XX ADK76466;

XX 20-MAY-2004 (first entry)

XX Chimeric phosphorothioate oligonucleotide to target Nav1.3 #3800.

XX Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
 KW diabetic neuropathy; arthritic pain; migraine headache;
 KW infantile epilepsy; ataxia; ss.

XX Synthetic.

XX WO2004016754-A2.

XX 26-FEB-2004.

XX 14-AUG-2003; 2003WO-US025465.

XX 14-AUG-2002; 2002US-0403416P.

XX (PHAA) PHARMACIA CORP.

XX Roberts SL;

XX WPI; 2004-203785/19.

XX New antisense compound targeted to a nucleic acid molecule encoding
 PT Nav1.3, useful for treating a disease or condition associated
 PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
 PT disorder, or ataxia.

XX Claim 4; SEQ ID NO 3800; 417pp; English.

XX The present invention relates to an antisense compound targeted to a
 CC nucleic acid molecule encoding Nav1.3, where the antisense compound
 CC specifically hybridizes with and inhibits the expression of Nav1.3. The
 CC compound and composition are useful for treating a disease or condition
 CC associated with Nav1.3, e.g. pain including but not limited to
 CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
 CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
 CC pain from burns, migraine headache, cluster headache, mild-to-moderate
 CC headache; seizure disorder such as childhood seizure disorder, including
 CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
 CC sequence represents a chimeric phosphorothioate oligonucleotide with
 CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
 CC human Nav1.3 expression, the oligonucleotides are designed to target
 CC different regions of the human Nav1.3 RNA.

XX Sequence 20 BP; 1 A; 3 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2709 AAAAAAATAAAAAAAAAA 2724
 Db 16 AAAAAAATAAAAAAAAAA 1


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RESULT 1511
ADK75214/C
ID ADK75214 standard; DNA; 20 BP.
XX
AC
XX
ADK75214;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #2548.
XX
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
XX WO2004016754-A2.
XX
XX 26-FEB-2004.
XX
XX 14-AUG-2003; 2003WO-US025465.
XX
XX 14-AUG-2002; 2002US-0403416P.
XX
XX (PHAA ) PHARMACIA CORP.
XX
XX Roberds SL;
XX
XX WPI; 2004-203785/19.
XX
XX New antisense compound targeted to a nucleic acid molecule encoding
XX Nav1.3, useful for treating a disease or condition associated
XX with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
XX disorder, or ataxia.
XX
XX Claim 4; SEQ ID NO 2548; 417pp; English.
XX
XX The present invention relates to an antisense compound targeted to a
XX nucleic acid molecule encoding Nav1.3, where the antisense compound
XX specifically hybridizes with and inhibits the expression of Nav1.3. The
XX compound and composition are useful for treating a disease or condition
XX associated with Nav1.3, e.g. pain including but not limited to
XX neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
XX diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
XX pain from burns, migraine headache, cluster headache, mild-to-moderate
XX headache; seizure disorder such as childhood seizure disorder, including
XX but not limited to neonatal or infantile epilepsy; or ataxia. The present
XX sequence represents a chimeric phosphorothioate oligonucleotide with
XX 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
XX human Nav1.3 expression, the oligonucleotides are designed to target
XX different regions of the human Nav1.3 RNA.
XX
XX Sequence 20 BP; 1 A; 2 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2709 AAAAAAAAAAAAAA 2724
Db 20 AAAAAAAAAAAAAA 5

RESULT 1512
AEE79008
ID AEE79008 standard; DNA; 20 BP.
XX
AC AEE79008;
XX
XX 09-FEB-2006 (first entry)
XX
DE Human dopamine receptor D2 (DRD2) DNA oligonucleotide SEQ ID NO:2629.
XX
XX

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```

KW Diagnosis; therapeutic; neurological disease; psychiatric disorder;
KW neuropsychologic disorder; dopamine receptor D2; DRD2; ss.
XX
OS Homo sapiens.
XX
XX WO2005118843-A1.
XX
XX 15-DEC-2005.
XX
XX 01-JUN-2005; 2005WO-AU000775.
XX
XX 01-JUN-2004; 2004AU-00902919.
XX
XX (UYQU-) UNIV QUEENSLAND TECHNOLOGY.
XX
XX Morris CP, Van Daal A, Swagell CD, Lawford BR, Young RM;
XX WPI; 2006-047555/05.
XX
XX Identifying genetic profile associated with a neurological, psychiatric,
XX or psychological condition, comprises screening individuals for a
XX polymorphism in a genetic locus comprising the dopamine receptor D2
XX (DRD2) gene.
XX
XX Disclosure; SEQ ID NO 2629; 634pp; English.
XX
XX The invention relates to a method of identifying a genetic profile
XX associated with a neurological, psychiatric or psychological condition,
XX phenotype or state including a sub-threshold neurological, psychiatric or
XX psychological condition, phenotype or state in an individual, comprising
XX screening individuals for a polymorphism in a genetic locus comprising
XX the dopamine receptor D2 (DRD2) gene. The invention also relates to a
XX genetic mutation providing a genetic marker for a neurological,
XX psychiatric, or psychological condition, state or phenotype in an
XX individual, where the presence of a 957C polymorphism is indicative of a
XX predisposition to developing a neurological, psychiatric or psychological
XX condition, phenotype or state. The compositions and methods are useful
XX for identifying a genetic profile associated with a neurological,
XX psychiatric or psychological condition. The method enables clinicians to
XX make a genetic-based diagnosis of a neurological, psychiatric or
XX psychological condition and can thereby implement treatment or
XX preventative or symptom-ameliorating protocols to reduce the adverse
XX consequences of the condition. This sequence represents a human dopamine
XX receptor D2 (DRD2) DNA oligonucleotide used in the scope of the
XX invention.
XX
XX Sequence 20 BP; 15 A; 0 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 16; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2708 TAAAAAAAAAAAAA 2723
Db 5 TAAAAAAAAAAAAA 20

RESULT 1513
AAZ32679
ID AAZ32679 standard; DNA; 19 BP.
XX
XX AAZ32679;
XX
XX 21-JAN-2000 (first entry)
XX
XX Human IL-10 PCR primer #1.
XX
XX IL-10; interleukin-10; reverse transcription; expression; RNA; liposome;
XX cationic; gene therapy; rheumatoid arthritis; targeting;
XX distal administration; delivery; macrophage; uptake; polyamine; PCR;
XX primer; ss.
XX
XX Synthetic.

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OS Homo sapiens.
XX
XX PN WO9554344-A1.
XX
XX PD 28-OCT-1999.
XX
XX PF 16-APR-1999; 99WO-GB001171.
XX
XX PR 17-APR-1998; 98GB-00008268.
XX
XX PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
XX
XX PI Miller AD, Etheridge CJ, Fellowes R, Woo P, Duffels AT, Ley SV;
XX
XX DR WPI; 1999-633970/54.
XX
XX
XX PT Use of composition comprising combination of derivatized cationic
XX PT liposomes and active agent in gene therapy, especially for amelioration
XX PT of established arthritis by IL-10 gene therapy.
XX
XX PS Example 1; Page 30; 115pp; English.
XX
XX CC This sequence represents a human IL-10 (interleukin-10) PCR primer #1,
XX CC used with primer #2 (AAZ32680) to amplify cDNA (generated via reverse
XX CC transcription of RNA) and DNA encoding human IL-10 in murine tissue
XX CC previously transfected with a human IL-10 expression vector. The
XX CC amplified DNA was then detected via in situ hybridisation with a human IL
XX CC -10-specific hybridisation probe (AAZ32681). The invention relates to the
XX CC use of a derivatised cationic liposome containing an agent of interest
XX CC (e.g., an IL-10 expression vector) to deliver the agent to a site that is
XX CC distal to the site of liposome administration. The derivatised cationic
XX CC liposome comprises a cationic liposome-forming entity (e.g., a lipid),
XX CC and a head-group and/or ligand which increases macrophage uptake of the
XX CC cationic liposome. Such liposomes can be used for the delivery of a
XX CC therapeutic agent, and is especially useful for the amelioration of
XX CC established rheumatoid arthritis by IL-10 gene therapy. A head-group
XX CC and/or ligand which increases macrophage uptake is used to improve
XX CC targeting and thereby make more efficient use of the cationic liposome
XX CC and agent of interest. If cholesterol is used as the cationic liposome-
XX CC forming entity, it stabilises the resultant liposomal bilayer. The
XX CC cationic liposome-forming entity is linked to the head group via a
XX CC carbamoyl linkage which results in the liposome having minimal toxicity.
XX CC A polyamine group used as the head-group increases the overall positive
XX CC charge on the liposome, and also increases the DNA binding and
XX CC stabilisation of the liposome. As polyamines occur naturally in cells,
XX CC toxicological problems should be minimal
XX
XX SQ Sequence 19 BP; 8 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.3%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1542 TGAAGACCAAGACCCGAC 1560
DB 1 TGAAGACCAAGACCCGAC 19
|||||
RESULT 1514
ABZ79441
ID ABZ79441 standard; DNA; 19 BP.
XX
XX AC ABZ79441;
XX
XX DT 01-MAY-2003 (first entry)
XX
XX DE Acetyl-Coenzyme A-carboxylase-alpha gene PCR primer, SEQ ID 128.
XX
XX KW Human; enzyme; acetyl-Coenzyme A-carboxylase-alpha; ACC-alpha; cancer;
XX KW breast; ovary; PCR; primer; ss.
XX
XX OS Homo sapiens.
XX

PN WO2002100896-A2.
XX
XX PD 19-DEC-2002.
XX
XX PF 12-JUN-2002; 2002WO-FR002015.
XX
XX PR 13-JUN-2001; 2001FR-00007740.
XX
XX PR 05-MAR-2002; 2002FR-00002788.
XX
XX PA (CNRS ) CNRS CENT NAT RECH SCI.
XX PA (UYDY-) UNIV LYON 1 BERNARD CLAUDE.
XX
XX PI Dalla Venezia NL, Magnard CM, Lenoir GM, Sinilnikova-Erard O;
XX
XX DR WPI; 2003-175165/17.
XX
XX
XX PT In vitro diagnosis of cancer, particularly breast and ovarian cancer, or
XX PT susceptibility, comprises detecting alterations in the acetyl coenzyme A-
XX PT carboxylase alpha gene or protein expression.
XX
XX PS Example 1; Page 12; 56pp; French.
XX
XX CC The present invention relates to human acetyl-Coenzyme A-carboxylase-
XX CC alpha (ACC-alpha; see ABZ79442), which can be used for in vitro diagnosis
XX CC of cancer (or of an increased risk of developing it), by detecting ACC-
XX CC alpha gene mutations or polymorphisms, or altered ACC-alpha protein
XX CC expression, relative to a control population. The method is particularly
XX CC used to diagnose cancer, especially of breast or ovary, or for assessing
XX CC the risk of developing such cancers. The present sequence is a PCR
XX CC primer, which was used in an example from the invention
XX
XX SQ Sequence 19 BP; 5 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2384 ACTGTGCCCATCTCTGAAAG 2402
DB 1 ACTGAGCCCCCTCTGAAAG 19
|||||
RESULT 1515
ADF93091/c
ID ADF93091 standard; RNA; 19 BP.
XX
XX AC ADF93091;
XX
XX DT 26-FEB-2004 (first entry)
XX
XX DE Human EZH2 siRNA lower strand, SEQ ID 296.
XX
XX KW Human; polycomb group protein; EZH2; short interfering nucleic acid;
XX KW siRNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA;
XX KW miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy;
XX KW cancer; restenosis; drug screening; diagnosis;
XX KW therapeutic target identification; pharmacogenomics;
XX KW gene function analysis; gene mapping; cytostatic; vasotropic; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO2003070887-A2.
XX
XX PD 28-AUG-2003.
XX
XX PF 13-FEB-2003; 2003WO-US004402.
XX
XX PR 20-FEB-2002; 2002US-0358580P.
XX
XX PR 11-MAR-2002; 2002US-0363124P.
XX
XX PR 06-JUN-2002; 2002US-0386782P.
XX
XX PR 29-AUG-2002; 2002US-0406784P.
XX
XX PR 05-SEP-2002; 2002US-0408378P.
XX
XX PR 09-SEP-2002; 2002US-0409293P.

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PR 19-NOV-2002; 2002US-0427467P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Haerberli P, Usman N;
XX
XX WPI; 2003-712612/67.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of prostatic cancer, downregulates expression of the EZH2 gene.
XX
PS Example 7; Page 121; 140pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human polycomb group protein EZH2 gene by
CC RNA interference. The siNAs may or may not comprise ribonucleotides and
CC may be double or single stranded. They further comprise sense and
CC antisense regions, or alternatively are assembled from a sense
CC oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs
CC include short interfering RNA (siRNA), double-stranded RNA, micro-RNA
CC (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or
CC chemically modified, can contain deoxyribonucleotides, and can be
CC synthesised. The invention also relates to kits for the in vitro or in
CC vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors
CC that express siNA. The siNAs are used to modulate expression of the EZH2
CC gene in cells, tissue explants or organisms (e.g., by ex vivo gene
CC therapy), or in grafts and transplants for the treatment of a variety of
CC conditions. They may be used for treating cancer. The siNAs are also
CC useful for drug screening, diagnosis, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the lower strand of a human EZH2 targeted
CC double stranded siNA.
XX
SQ Sequence 19 BP; 2 A; 1 C; 1 G; 0 T; 15 U; 0 Other;
Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2724
DB 19 ACTTGA 1

RESULT 1516
ADF92943
ID ADF92943 standard; RNA; 19 BP.
XX
AC ADF92943;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human EZH2 transcript target sequence/siNA upper strand, SEQ ID 148.
XX
KW Human; polycomb group protein; EZH2; short interfering nucleic acid;
KW siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA;
KW miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy;
KW cancer; restenosis; drug screening; diagnosis;
KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; cytostatic; vasotropic; ss.
XX
OS Homo sapiens.
XX
PN W0203070887-A2.
XX
XX 28-AUG-2003.
PD
PF 13-FEB-2003; 2003WO-US004402.
XX
PR 20-FEB-2002; 2002US-0358580P.
XX

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PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 19-NOV-2002; 2002US-0427467P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Haerberli P, Usman N;
XX
XX WPI; 2003-712612/67.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of prostatic cancer, downregulates expression of the EZH2 gene.
XX
PS Example 7; Page 121; 140pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human polycomb group protein EZH2 gene by
CC RNA interference. The siNAs may or may not comprise ribonucleotides and
CC may be double or single stranded. They further comprise sense and
CC antisense regions, or alternatively are assembled from a sense
CC oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs
CC include short interfering RNA (siRNA), double-stranded RNA, micro-RNA
CC (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or
CC chemically modified, can contain deoxyribonucleotides, and can be
CC synthesised. The invention also relates to kits for the in vitro or in
CC vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors
CC that express siNA. The siNAs are used to modulate expression of the EZH2
CC gene in cells, tissue explants or organisms (e.g., by ex vivo gene
CC therapy), or in grafts and transplants for the treatment of a variety of
CC conditions. They may be used for treating cancer. The siNAs are also
CC useful for drug screening, diagnosis, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the upper strand of a human EZH2 targeted
CC double stranded siNA, which is identical to the EZH2 transcript target
CC sequence.
XX
SQ Sequence 19 BP; 15 A; 1 C; 1 G; 0 T; 2 U; 0 Other;
Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 1.2e+03;
Matches 16; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 2706 ACTAAAAA 2724
DB 1 ACUUGA 19

RESULT 1517
ADL79331
ID ADL79331 standard; RNA; 19 BP.
XX
AC ADL79331;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human HER2 (EGFR2) siNA lower strand, SEQ ID NO:496.
XX
KW RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; cancer;
KW cytostatic; human; oncogene; epidermal growth factor receptor; EGFR;
KW HER2; EGFR2; neu; erbB2; c-erbB-2; ss.
XX
OS Homo sapiens.
XX

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RESULT 1521
ADR80868/c
ID ADR80868 standard; DNA; 19 BP.
XX
AC ADR80868;
CC
DT 16-DEC-2004 (first entry)
XX
DE Human glucose-6-phosphatase oligonucleotide seqid 5367.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW cytostatic; anticonvulsant; nootropic; muscula; anti-HIV;
KW RNA interference; iRNA; antisense technology; lipid metabolism;
KW cholesterol imbalance; dyslipidaemia hypercholesterolaemia;
KW coronary artery disease; CAD; coronary heart disease; CHD;
KW atherosclerosis; hepatic glucose production;
KW glucose-metabolism-related disorder; diabetes; cancer; breast cancer;
KW colon cancer; lung cancer; neurological disease; Huntington disease;
KW spinocerebellar ataxia; viral disease; AIDS; glucose-6-phosphatase; ss.
XX
OS Homo sapiens.
XX
PN WO2004080406-A2.
XX
PD 23-SEP-2004.
XX
PF 08-MAR-2004; 2004WO-US007070.
XX
PR 07-MAR-2003; 2003US-0452682P.
PR 12-MAR-2003; 2003US-0454265P.
PR 13-MAR-2003; 2003US-0454962P.
PR 13-MAR-2003; 2003US-0455050P.
PR 14-APR-2003; 2003US-0462894P.
PR 17-APR-2003; 2003US-0463772P.
PR 25-APR-2003; 2003US-0465665P.
PR 25-APR-2003; 2003US-0465802P.
PR 09-MAY-2003; 2003US-0469612P.
PR 08-AUG-2003; 2003US-0493986P.
PR 11-AUG-2003; 2003US-0494597P.
PR 26-SEP-2003; 2003US-0506341P.
PR 09-OCT-2003; 2003US-0510246P.
PR 10-OCT-2003; 2003US-0510318P.
PR 07-NOV-2003; 2003US-0518453P.
XX
PA (ALNY-) ALNYLAM PHARM.
XX
XX Manoharan M, Bumcrot D;
XX
XX WPI; 2004-677362/66.
XX
XX Interference RNA agent useful for treating dyslipidemias, coronary artery
XX disease, diabetes, cancer or neurological disease, comprises sense
XX sequence and antisense sequence which has specific modifications.
XX
XX Example 5; SEQ ID NO 5367; 378pp; English.
XX
XX The invention describes a RNA interference (iRNA) agent (I) comprising a
XX sense sequence and an antisense sequence, where the sense sequences have
XX one or more asymmetrical 2'-O alkyl modifications, the antisense
XX sequences have one or more asymmetrical phosphorothioate modifications
XX and the antisense sequence targets a human gene sequence. Also described
XX are: a pharmaceutical preparation comprising (I); reducing (MI) apoB-100
XX levels or glucose-6-phosphatase levels in a subject; producing (I);
XX stabilising (I), involves selecting a sequence with activity and
XX introducing one or more asymmetrical modification in the sequence, where
XX the modification decreases nuclease sensitivity while not decreasing its
XX activity; a kit comprising (I) and instruction for its use; and a device
XX that can be dispense or administer a composition comprising (I). (I) is
XX useful for reducing apoB-100 levels or glucose-6-phosphatase levels. (MI)
XX is useful for reducing apoB-100 levels or glucose-6-phosphatase levels.
XX The subject is suffering from a disorder characterised by elevated or
XX otherwise unwanted expression of apoB-100, elevated or otherwise unwanted
XX levels of cholesterol, and/or dysregulation of lipid metabolism. The

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CC disorder is chosen from the HDL/LDL cholesterol imbalance,
CC dyslipidaemias, hypercholesterolaemia, statin-resistant
CC hypercholesterolaemia, coronary artery disease (CAD), coronary heart
CC disease (CHD) and atherosclerosis. (I) is administered to a subject to
CC inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorder e.g. diabetes or type-2 diabetes. (I) is useful for
CC treating the diseases as mentioned above, cancer (e.g. breast, colon or
CC lung cancer), neurological disease (e.g., Huntington disease or
CC spinocerebellar ataxia) or viral disease (e.g., AIDS). This sequence
CC represents a human glucose-6-phosphatase antisense oligonucleotide that
CC can be used to control glucose-6-phosphatase gene expression.
XX
SQ Sequence 19 BP; 1 A; 1 C; 2 G; 15 T; 0 U; 0 Other;
Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2707 CTAAAAAAGGAAAAA 2725
DB 19 CTCAAAAAGGAAAAA 1
RESULT 1522
ADR85325/c
ID ADR85325 standard; DNA; 19 BP.
XX
AC ADR85325;
XX
DT 13-JAN-2005 (first entry)
XX
DE Glucose-6-phosphatase antisense inhibition target seqid 5367.
XX
KW antilipemic; cardiant; vasotropic; antiarteriosclerotic; antidiabetic;
KW interference RNA; iRNA; cholesterol moiety; apoB; glucose-6-phosphatase;
KW lipid metabolism; cholesterol imbalance; dyslipidaemia;
KW familial combined hyperlipidaemia; acquired hyperlipidaemia;
KW hypercholesterolaemia; statin-resistant hypercholesterolaemia;
KW coronary artery disease; coronary heart disease; atherosclerosis;
KW hepatic glucose production; glucose-metabolism-related disorder;
KW type-2 diabetes; glitaxone-resistant diabetes; human;
KW glucose-6-phosphatase; antisense inhibition; ss.
XX
OS Homo sapiens.
XX
XX WO2004091515-A2.
XX
XX 28-OCT-2004.
XX
XX 09-APR-2004; 2004WO-US011255.
XX
XX 09-APR-2003; 2003US-0462097P.
XX 10-APR-2003; 2003US-0461915P.
XX 14-APR-2003; 2003US-0462894P.
XX 17-APR-2003; 2003US-0463772P.
XX 25-APR-2003; 2003US-0465665P.
XX 25-APR-2003; 2003US-0465802P.
XX 09-MAY-2003; 2003US-0469612P.
XX 08-AUG-2003; 2003US-0493986P.
XX 11-AUG-2003; 2003US-0494597P.
XX 26-SEP-2003; 2003US-0506341P.
XX 09-OCT-2003; 2003US-0510246P.
XX 10-OCT-2003; 2003US-0510318P.
XX 07-NOV-2003; 2003US-0518453P.
XX 08-MAR-2004; 2004WO-US007070.
XX 05-APR-2004; 2004WO-US010586.
XX
XX (ALNY-) ALNYLAM PHARM INC.
XX
XX Manoharan M, Elbashir S, Harborth J;
XX WPI; 2004-766693/75.
XX
XX

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PT New interference RNA agent comprising sense sequence and antisense
PT sequence having cholesterol moieties, useful for reducing apoB-100 levels
PT or glucose-6-phosphatase levels.

XX Example 4; SEQ ID NO 5367; 324pp; English.

XX The invention describes an interference RNA (irna) agent (I) comprising a
CC sense sequence and an antisense sequence, where the sense sequence
CC comprises one or more cholesterol moieties, and the antisense sequence
CC targets a human gene sequence. The following are disclosed: a
CC pharmaceutical composition comprising (I); and a device for administering
CC (I) into a patient. (I) is useful for reducing apoB-100 levels or glucose
CC -6-phosphatase levels in a subject. (I) targets a sequence identical to
CC any one of sequences as given in the specification. (I) comprises a
CC cholesterol moiety. The cholesterol moiety is coupled to a sense strand.
CC (I) further comprises a second cholesterol moiety. The second cholesterol
CC moiety is coupled to a sense strand. (I) has 21 or more nucleotides. The
CC duplex region of (I) is 19 nucleotides in length. The subject is
CC suffering from a disorder having elevated or otherwise unwanted
CC expression of apo-B-100, elevated or otherwise unwanted levels of
CC cholesterol, and/or dysregulation of lipid metabolism. The disorder is
CC chosen from HDL/LDL cholesterol imbalance, dyslipidaemia (e.g., familial
CC combined hyperlipidaemia or acquired hyperlipidaemia),
CC hypercholesterolaemia, statin-resistant hypercholesterolaemia, coronary
CC artery disease, coronary heart disease and atherosclerosis, preferably
CC statin-resistant hypercholesterolaemia. (I) is administered to a subject
CC to inhibit hepatic glucose production or for treating glucose-metabolism-
CC related disorders e.g., type-2 diabetes or glitazone-resistant diabetes.
CC (I) has endonuclease or exonuclease resistance. This sequence represents
CC a human glucose-6-phosphatase palindromic sequence that may be useful as
CC a target for antisense inhibition.

XX SQ Sequence 19 BP; 1 A; 1 C; 2 G; 15 T; 0 U; 0 Other;

Query Match 0.68; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAAAGAAAAA 2725
Db 19 CTCAGAAAAAGAAAAA 1

RESULT 1523

ADX86501

ID ADX86501 standard; RNA; 19 BP.

AC ADX86501;

XX 05-MAY-2005 (first entry)

XX XIAP targeting siRNA SEQ ID NO 372.

XX ds; primer; short interfering RNA; siRNA;
KW X-linked inhibitor of apoptosis protein; XIAP; RNA interference; RNAi;
KW cytostatic; cancer; gene silencing.

OS Synthetic.

XX WO2005014811-A2.

PN 17-FEB-2005.

XX 06-AUG-2004; 2004WO-US025589.

XX 08-AUG-2003; 2003US-0493561P.

PR 23-OCT-2003; 2003US-00693059.

PR 24-NOV-2003; 2003US-00720448.

PR 03-DEC-2003; 2003US-00727780.

PR 14-JAN-2004; 2004US-00757803.

PR 10-FEB-2004; 2004US-0543480P.

PR 13-FEB-2004; 2004US-00780447.

PR 16-APR-2004; 2004US-00826966.

PR 30-APR-2004; 2004WO-US013456.

PR 24-MAY-2004; 2004WO-US016390.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX Meswigen J, Chowira BM;

XX WPI; 2005-163247/17.

XX New chemically synthesized double stranded short interfering nucleic acid

XX that directs cleavage of an X-linked inhibitor of apoptosis protein

XX (XIAP) RNA via RNA interference, useful in preparing a composition for

XX treating cancer.

XX Claim 33; SEQ ID NO 372; 202pp; English.

XX This invention describes novel chemically synthesized double stranded

XX short interfering nucleic acid (siRNA) molecules which direct cleavage of

XX a X-linked inhibitor of apoptosis protein (XIAP) RNA via RNA interference

XX (RNAi), where each strand of the siRNA molecule is about 18-23

XX nucleotides in length and one strand of the siRNA molecule comprises

XX nucleotide sequence having sufficient complementarity to the XIAP RNA.

XX The siRNA molecules can be used to make a cytostatic composition

XX comprising the siRNA molecule in a carrier or diluent. The sense and

XX antisense strands are connected via a linker molecule. The pyrimidine

XX nucleotides in the sense region are 2'-O-methyl pyrimidine nucleotides.

XX The purine nucleotides in the sense region are 2'-deoxy purine

XX nucleotides and the pyrimidine nucleotides are 2'-deoxy-2'-fluoro

XX pyrimidine nucleotides. The fragment comprising the sense region includes

XX a terminal cap moiety at a 5'-end, a 3'-end, or both of the 5' and 3'

XX ends of the fragment comprising the sense region. The terminal cap moiety

XX is an inverted deoxy abasic moiety. The pyrimidine nucleotides of the

XX antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides and the

XX purine nucleotides are 2'-O-methyl purine nucleotides. The purine

XX nucleotides present in the antisense region comprise 2'-deoxy- purine

XX nucleotides. The antisense region comprises a phosphorothioate

XX internucleotide linkage at the 3' end of the antisense region. The

XX antisense region comprises a glyceryl modification at a 3' end of the

XX antisense region. About 19 nucleotides of each fragment of the siRNA

XX molecule are base-paired to the complementary nucleotides of the other

XX fragment of the siRNA. The 5'-end of the fragment comprising the

XX antisense region optionally includes a phosphate group. The XIAP RNA

XX comprises Genbank Accession No. NM_001167. The chemically synthesized

XX double stranded short interfering nucleic acid (siRNA) molecule is useful

XX in preparing a composition for treating cancer. ADX86130-ADX87180

XX represent siRNA molecules which are used in RNA interference mediated

XX inhibition of XIAP gene expression.

XX SQ Sequence 19 BP; 17 A; 1 C; 0 G; 0 T; 1 U; 0 Other;

Query Match 0.6%; Score 15.8; DB 1; Length 19;

Best Local Similarity 89.5%; Pred. No. 1.2e+03;

Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAGAAAAA 2727

Db 1 AAAAAAAGAAAAA 19

RESULT 1524

ADX86332/c

ID ADX86332 standard; RNA; 19 BP.

XX ADX86332;

XX 05-MAY-2005 (first entry)

XX XIAP targeting siRNA SEQ ID NO 203.

XX ds; primer; short interfering RNA; siRNA;

XX X-linked inhibitor of apoptosis protein; XIAP; RNA interference; RNAi;

XX cytostatic; cancer; gene silencing.

OS Synthetic.
XX WO2005014811-A2.
PN 17-FEB-2005.
XX
XX
XX 06-AUG-2004; 2004WO-US025589.
XX
XX 08-AUG-2003; 2003US-0493561P.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.
PR 10-FEB-2004; 2004US-0543480P.
PR 13-FEB-2004; 2004US-00780447.
PR 16-APR-2004; 2004US-00826966.
PR 30-APR-2004; 2004WO-US013456.
PR 24-MAY-2004; 2004WO-US016390.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
PA
XX Mcswiggen J, Chowrira BM;
PI
XX WPI; 2005-163247/17.
XX
XX New chemically synthesized double stranded short interfering nucleic acid
PT that directs cleavage of an X-linked inhibitor of apoptosis protein
PT (XIAP) RNA via RNA interference, useful in preparing a composition for
PT treating cancer.
XX
XX Claim 33; SEQ ID NO 203; 202pp; English.
XX
XX This invention describes novel chemically synthesized double stranded
CC short interfering nucleic acid (siRNA) molecules which direct cleavage of
CC a X-linked inhibitor of apoptosis protein (XIAP) RNA via RNA interference
CC (RNAi), where each strand of the siRNA molecule is about 18-23
CC nucleotides in length and one strand of the siRNA molecule comprises
CC nucleotide sequence having sufficient complementarity to the XIAP RNA.
CC The siRNA molecules can be used to make a cytostatic composition
CC comprising the siRNA molecule in a carrier or diluent. The sense and
CC antisense strands are connected via a linker molecule. The pyrimidine
CC nucleotides in the sense region are 2'-O-methyl pyrimidine nucleotides.
CC The purine nucleotides in the sense region are 2'-deoxy purine
CC nucleotides and the pyrimidine nucleotides are 2'-deoxy-2'-fluoro
CC pyrimidine nucleotides. The fragment comprising the sense region includes
CC a terminal cap moiety at a 5'-end, a 3'-end, or both of the 5' and 3'
CC ends of the fragment comprising the sense region. The terminal cap moiety
CC is an inverted deoxy abasic moiety. The pyrimidine nucleotides of the
CC antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides and the
CC purine nucleotides are 2'-O-methyl purine nucleotides. The purine
CC nucleotides present in the antisense region comprise 2'-deoxy- purine
CC nucleotides. The antisense region comprises a phosphorothioate
CC internucleotide linkage at the 3' end of the antisense region. The
CC antisense region comprises a glyceryl modification at a 3' end of the
CC antisense region. About 19 nucleotides of each fragment of the siRNA
CC molecule are base-paired to the complementary nucleotides of the other
CC molecule. The siRNA molecules are used in RNA interference mediated
CC inhibition of XIAP gene expression.
XX
SQ Sequence 19 BP; 4 A; 0 C; 2 G; 0 T; 13 U; 0 Other;

Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2703 TGTAATAAAAAAAAAA 2721
Db 19 TCTACTAAATAATAAAAA 1

RESULT 1525
ADX86799
ID ADX86799 standard; RNA; 19 BP.
XX
XX AC ADX86799;
XX
XX DT 05-MAY-2005 (first entry)
XX
XX XIAP targeting siRNA SEQ ID NO 670.
DE
XX ds; primer; short interfering RNA; siRNA;
KW X-linked inhibitor of apoptosis protein; XIAP; RNA interference; RNAi;
KW cytostatic; cancer; gene silencing.
XX
XX Synthetic.
XX WO2005014811-A2.
XX
XX PD 17-FEB-2005.
XX
XX PF 06-AUG-2004; 2004WO-US025589.
XX
XX PR 08-AUG-2003; 2003US-0493561P.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.
PR 10-FEB-2004; 2004US-0543480P.
PR 13-FEB-2004; 2004US-00780447.
PR 16-APR-2004; 2004US-00826966.
PR 30-APR-2004; 2004WO-US013456.
PR 24-MAY-2004; 2004WO-US016390.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Mcswiggen J, Chowrira BM;
PI
XX WPI; 2005-163247/17.
XX
XX New chemically synthesized double stranded short interfering nucleic acid
PT that directs cleavage of an X-linked inhibitor of apoptosis protein
PT (XIAP) RNA via RNA interference, useful in preparing a composition for
PT treating cancer.
XX
XX Claim 33; SEQ ID NO 670; 202pp; English.
XX
XX This invention describes novel chemically synthesized double stranded
CC short interfering nucleic acid (siRNA) molecules which direct cleavage of
CC a X-linked inhibitor of apoptosis protein (XIAP) RNA via RNA interference
CC (RNAi), where each strand of the siRNA molecule is about 18-23
CC nucleotides in length and one strand of the siRNA molecule comprises
CC nucleotide sequence having sufficient complementarity to the XIAP RNA.
CC The siRNA molecules can be used to make a cytostatic composition
CC comprising the siRNA molecule in a carrier or diluent. The sense and
CC antisense strands are connected via a linker molecule. The pyrimidine
CC nucleotides in the sense region are 2'-O-methyl pyrimidine nucleotides.
CC The purine nucleotides in the sense region are 2'-deoxy purine
CC nucleotides and the pyrimidine nucleotides are 2'-deoxy-2'-fluoro
CC pyrimidine nucleotides. The fragment comprising the sense region includes
CC a terminal cap moiety at a 5'-end, a 3'-end, or both of the 5' and 3'
CC ends of the fragment comprising the sense region. The terminal cap moiety
CC is an inverted deoxy abasic moiety. The pyrimidine nucleotides of the
CC antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides and the
CC purine nucleotides are 2'-O-methyl purine nucleotides. The purine
CC nucleotides present in the antisense region comprise 2'-deoxy- purine
CC nucleotides. The antisense region comprises a phosphorothioate
CC internucleotide linkage at the 3' end of the antisense region. The
CC antisense region comprises a glyceryl modification at a 3' end of the
CC antisense region. About 19 nucleotides of each fragment of the siRNA
CC molecule are base-paired to the complementary nucleotides of the other
CC molecule. The siRNA molecules are used in RNA interference mediated
CC inhibition of XIAP gene expression.
XX

PT New chemically synthesized double stranded short interfering nucleic acid
PT that directs cleavage of an X-linked inhibitor of apoptosis protein
PT (XIAP) RNA via RNA interference, useful in preparing a composition for
PT treating cancer.

XX Claim 33; SEQ ID NO 296; 202pp; English.

XX This invention describes novel chemically synthesized double stranded
CC short interfering nucleic acid (siRNA) molecules which direct cleavage of
CC a X-linked inhibitor of apoptosis protein (XIAP) RNA via RNA interference
CC (RNAi), where each strand of the siRNA molecule is about 18-23
CC nucleotides in length and one strand of the siRNA molecule comprises
CC nucleotide sequence having sufficient complementarity to the XIAP RNA.
CC The siRNA molecules can be used to make a cytostatic composition
CC comprising the siRNA molecule in a carrier or diluent. The sense and
CC antisense strands are connected via a linker molecule. The pyrimidine
CC nucleotides in the sense region are 2'-O-methyl pyrimidine nucleotides.
CC The purine nucleotides in the sense region are 2'-deoxy purine
CC nucleotides and the pyrimidine nucleotides are 2'-deoxy-2'-fluoro
CC pyrimidine nucleotides. The fragment comprising the sense region includes
CC a terminal cap moiety at a 5'-end, a 3'-end, or both of the 5' and 3',
CC ends of the fragment comprising the sense region. The terminal cap moiety
CC is an inverted deoxy abasic moiety. The pyrimidine nucleotides of the
CC antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides and the
CC purine nucleotides are 2'-O-methyl purine nucleotides. The purine
CC nucleotides present in the antisense region comprise 2'-deoxy- purine
CC nucleotides. The antisense region comprises a phosphorothioate
CC internucleotide linkage at the 3' end of the antisense region. The
CC antisense region comprises a glyceryl modification at a 3' end of the
CC antisense region. About 19 nucleotides of each fragment of the siRNA
CC molecule are base-paired to the complementary nucleotides of the other
CC fragment of the siRNA. The 5'-end of the fragment comprising the
CC antisense region optionally includes a phosphate group. The XIAP RNA
CC comprises Genbank Accession No. NM 001167. The chemically synthesized
CC double stranded short interfering nucleic acid (siRNA) molecule is useful
CC in preparing a composition for treating cancer. ADX86130-ADX87180
CC represent siRNA molecules which are used in RNA interference mediated
CC inhibition of XIAP gene expression.

XX Sequence 19 BP; 17 A; 0 C; 1 G; 0 T; 1 U; 0 Other;

XX Query Match 0.6%; Score 15.8; DB 1; Length 19;
XX Best Local Similarity 89.5%; Pred. No. 1.2e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727

DB 1 AAAAAAAAAAGAAUA 19

RESULT 1528

ADX86892/C
ID ADX86892 standard; RNA; 19 BP.

XX AC ADX86892;

XX 05-MAY-2005 (first entry)

XX XIAP targeting siRNA SEQ ID NO 763.

XX ds; primer; short interfering RNA; siRNA;
KW X-linked inhibitor of apoptosis protein; XIAP; RNA interference; RNAi;
KW cytostatic; cancer; gene silencing.

XX Synthetic.

XX WO2005014811-A2.

XX 17-FEB-2005.

XX 06-AUG-2004; 2004WO-US025589.

XX 08-AUG-2003; 2003US-0493561P.

PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.
PR 10-FEB-2004; 2004US-0543480P.
PR 13-FEB-2004; 2004US-00780447.
PR 16-APR-2004; 2004US-00826966.
PR 30-APR-2004; 2004WO-US013456.
PR 24-MAY-2004; 2004WO-US016390.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX Mcswiggen J, Chowkira BM;

XX WPI; 2005-163247/17.

XX New chemically synthesized double stranded short interfering nucleic acid
PT that directs cleavage of an X-linked inhibitor of apoptosis protein
PT (XIAP) RNA via RNA interference, useful in preparing a composition for
PT treating cancer.

XX Claim 33; SEQ ID NO 763; 202pp; English.

XX This invention describes novel chemically synthesized double stranded
CC short interfering nucleic acid (siRNA) molecules which direct cleavage of
CC a X-linked inhibitor of apoptosis protein (XIAP) RNA via RNA interference
CC (RNAi), where each strand of the siRNA molecule is about 18-23
CC nucleotides in length and one strand of the siRNA molecule comprises
CC nucleotide sequence having sufficient complementarity to the XIAP RNA.
CC The siRNA molecules can be used to make a cytostatic composition
CC comprising the siRNA molecule in a carrier or diluent. The sense and
CC antisense strands are connected via a linker molecule. The pyrimidine
CC nucleotides in the sense region are 2'-O-methyl pyrimidine nucleotides.
CC The purine nucleotides in the sense region are 2'-deoxy-2'-fluoro
CC pyrimidine nucleotides. The fragment comprising the sense region includes
CC a terminal cap moiety at a 5'-end, a 3'-end, or both of the 5' and 3',
CC ends of the fragment comprising the sense region. The terminal cap moiety
CC is an inverted deoxy abasic moiety. The pyrimidine nucleotides of the
CC antisense region are 2'-deoxy-2'-fluoro pyrimidine nucleotides and the
CC purine nucleotides are 2'-O-methyl purine nucleotides. The purine
CC nucleotides present in the antisense region comprise 2'-deoxy- purine
CC nucleotides. The antisense region comprises a phosphorothioate
CC internucleotide linkage at the 3' end of the antisense region. The
CC antisense region comprises a glyceryl modification at a 3' end of the
CC antisense region. About 19 nucleotides of each fragment of the siRNA
CC molecule are base-paired to the complementary nucleotides of the other
CC fragment of the siRNA. The 5'-end of the fragment comprising the
CC antisense region optionally includes a phosphate group. The XIAP RNA
CC comprises Genbank Accession No. NM 001167. The chemically synthesized
CC double stranded short interfering nucleic acid (siRNA) molecule is useful
CC in preparing a composition for treating cancer. ADX86130-ADX87180
CC represent siRNA molecules which are used in RNA interference mediated
CC inhibition of XIAP gene expression.

XX Sequence 19 BP; 1 A; 1 C; 0 G; 0 T; 17 U; 0 Other;

XX Query Match 0.6%; Score 15.8; DB 1; Length 19;
XX Best Local Similarity 89.5%; Pred. No. 1.2e+03;
XX Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2727

DB 19 AAAAAAAAAAGAAATA 1

RESULT 1529

AEB04633/C
ID AEB04633 standard; RNA; 19 BP.

XX AC AEB04633;

XX 08-SEP-2005 (first entry)

XX Human IL-4R transcript target sequence/siRNA sense strand, SEQ ID:389.
 DE RNA interference; gene silencing; short interfering RNA; siRNA; cancer;
 XX hyperproliferation; neoplasm; cytostatic; viral infection; infection;
 KW virucide; inflammation; antiinflammatory; autoimmune disease;
 KW immune disorder; immunosuppressive; pulmonary disease;
 KW respiratory disease; respiratory-gen.; cardiovascular disease;
 KW cardiovascular-gen.; neurological disease; neuroprotective;
 KW renal disease; endocrine disease; genitourinary disease; nephrotropic;
 KW endocrine-gen.; liver disease; gastrointestinal disease; hepatotropic;
 KW ocular disease; ophthalmological; reproductive disorder; infertility;
 KW antiinfertility; gynecology and obstetrics; andrology;
 KW mitochondrial disease; prion disease; degeneration;
 KW interleukin-4 receptor; IL-4 receptor; ss.
 XX Homo sapiens.
 OS
 XX
 XX US2005143333-A1.
 PN
 XX
 XX 30-JUN-2005.
 PD
 XX
 XX 09-JUN-2004; 2004US-00863973.
 PF
 XX
 XX 18-MAY-2001; 2001US-0292217P.
 PR
 XX 20-JUN-2001; 2001US-0306883P.
 PR
 XX 13-AUG-2001; 2001US-0311865P.
 PR
 XX 20-FEB-2002; 2002US-0358580P.
 PR
 XX 06-MAR-2002; 2002US-0362016P.
 PR
 XX 11-MAR-2002; 2002US-0363124P.
 PR
 XX 20-MAY-2002; 2002WO-US015876.
 PR
 XX 06-JUN-2002; 2002US-0366782P.
 PR
 XX 29-AUG-2002; 2002US-0406784P.
 PR
 XX 05-SEP-2002; 2002US-0408378P.
 PR
 XX 09-SEP-2002; 2002US-0409293P.
 PR
 XX 15-JAN-2003; 2003US-0440129P.
 PR
 XX 14-FEB-2003; 2003WO-US004566.
 PR
 XX 20-FEB-2003; 2003WO-US005028.
 PR
 XX 30-FEB-2003; 2003WO-US005346.
 PR
 XX 30-APR-2003; 2003US-00427160.
 PR
 XX 23-MAY-2003; 2003US-0044853.
 PR
 XX 23-OCT-2003; 2003US-00693059.
 PR
 XX 24-NOV-2003; 2003US-00720448.
 PR
 XX 03-DEC-2003; 2003US-00727780.
 PR
 XX 14-JAN-2004; 2004US-00757803.
 PR
 XX 10-FEB-2004; 2004US-0543480P.
 PR
 XX 13-FEB-2004; 2004US-00780447.
 PR
 XX 16-APR-2004; 2004US-00826966.
 PR
 XX 30-APR-2004; 2004WO-US013456.
 PR
 XX 24-MAY-2004; 2004WO-US016390.
 XX
 XX (SIRN-) SIRNA THERAPEUTICS INC.
 PA
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 XX Richards I, Polisky B, Mcswiggen J;
 PI
 XX
 XX WPI; 2005-457799/46.
 DR
 XX
 XX Novel chemically synthesized double stranded short interfering nucleic
 PT acid molecule useful for cleaving interleukin 4 receptor RNA through RNA
 PT interference.
 PT
 XX
 XX Claim 33; SEQ ID NO 389; 128pp; English.
 PS
 XX
 XX The invention relates to chemically synthesized short interfering nucleic
 CC acids (siNAs) which downregulate expression of receptors for interleukin-
 CC 4 (e.g., IL-4 receptor (IL-4R), IL-13 receptor (IL-13R) and IL-2 receptor
 CC gamma (IL-2RG)) by RNA interference. The invention also relates to
 CC similar siNAs which interfere with the expression of the ligands for
 CC these receptors, namely IL-4 and IL-13. The siNAs of the invention may or
 CC may not comprise ribonucleotides, can contain deoxyribonucleotides, can
 CC be chemically modified and may be double or single stranded. They further
 CC comprise sense and antisense regions, or alternatively are assembled from
 CC a sense oligonucleotide and an antisense oligonucleotide. Specifically,

CC the siNAs include short interfering RNA (siRNA), double-stranded RNA,
 CC micro-RNA (miRNA) and short hairpin RNA (shRNA). The invention also
 CC relates to pharmaceutical compositions comprising an siNA targeted to
 CC human IL-4R (RefSeq accession number NM 000418), IL-13R, IL-2RG, IL-4 or
 CC IL-13, especially the siRNAs shown in AEB04245-AEB06055. The invention
 CC further discloses expression vectors and host cells comprising an siNA of
 CC the invention. The siNAs exhibit increased resistance to nuclease
 CC degradation compared to the prior art. The siNAs of the invention can be
 CC used to modulate expression of their target genes in cells, tissue
 CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
 CC conditions. They may be used in the treatment of interleukin-related
 CC proliferative conditions, viral infection, inflammatory conditions,
 CC autoimmune diseases, respiratory and pulmonary diseases (e.g., asthma,
 CC chronic obstructive pulmonary disease (COPD), allergies), cardiovascular
 CC diseases, neurological diseases, renal diseases, ocular diseases, liver
 CC diseases, mitochondrial diseases, endocrine diseases, prion diseases and
 CC reproduction-related conditions. The siNAs may also be used in drug
 CC screening, diagnosis, therapeutic target identification and validation,
 CC genetic engineering, pharmacogenomics, studying gene function, and gene
 CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
 CC represents the sense strand of a human IL-4R-targeted double-stranded
 CC siRNA, which is identical to the human IL-4R transcript target sequence.
 XX
 XX
 SQ Sequence 19 BP; 6 A; 8 C; 4 G; 0 T; 1 U; 0 Other;
 Query Match 0.6%; Score 15.8; DB 1; Length 19;
 Best Local Similarity 89.5%; Pred. No. 1.2e+03;
 Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1280 GGGGGCTTTGACATATCCT 1298
 Db 19 GGGGGCTTTGGCATGTCTT 1
 RESULT 1530
 AEB04833
 ID AEB04833 standard; RNA; 19 BP.
 XX
 AC AEB04833;
 XX
 DT 08-SEP-2005 (first entry)
 XX
 XX Human IL-4R siRNA antisense strand, SEQ ID:589.
 XX
 XX RNA interference; gene silencing; short interfering RNA; siRNA; cancer;
 KW hyperproliferation; neoplasm; cytostatic; viral infection; infection;
 KW virucide; inflammation; antiinflammatory; autoimmune disease;
 KW immune disorder; immunosuppressive; pulmonary disease;
 KW respiratory disease; respiratory-gen.; cardiovascular disease;
 KW cardiovascular-gen.; neurological disease; neuroprotective;
 KW renal disease; endocrine disease; genitourinary disease; nephrotropic;
 KW endocrine-gen.; liver disease; gastrointestinal disease; hepatotropic;
 KW ocular disease; ophthalmological; reproductive disorder; infertility;
 KW antiinfertility; gynecology and obstetrics; andrology;
 KW mitochondrial disease; prion disease; degeneration;
 KW interleukin-4 receptor; IL-4 receptor; ss.
 XX
 XX Homo sapiens.
 OS
 XX
 XX US2005143333-A1.
 PN
 XX
 XX 30-JUN-2005.
 PD
 XX
 XX 09-JUN-2004; 2004US-00863973.
 PF
 XX
 XX 18-MAY-2001; 2001US-0292217P.
 PR
 XX 20-JUL-2001; 2001US-0306883P.
 PR
 XX 13-AUG-2001; 2001US-0311865P.
 PR
 XX 20-FEB-2002; 2002US-0358580P.
 PR
 XX 06-MAR-2002; 2002US-0362016P.
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 XX 11-MAR-2002; 2002US-0363124P.
 PR
 XX 20-MAY-2002; 2002US-0366782P.
 PR
 XX 29-AUG-2002; 2002US-0406784P.
 PR
 XX 05-SEP-2002; 2002US-0408378P.
 PR
 XX 09-SEP-2002; 2002US-0409293P.
 PR
 XX 15-JAN-2003; 2003US-0440129P.
 PR
 XX 14-FEB-2003; 2003WO-US004566.
 PR
 XX 20-FEB-2003; 2003WO-US005028.
 PR
 XX 30-FEB-2003; 2003WO-US005346.
 PR
 XX 30-APR-2003; 2003US-00427160.
 PR
 XX 23-MAY-2003; 2003US-0044853.
 PR
 XX 23-OCT-2003; 2003US-00693059.
 PR
 XX 24-NOV-2003; 2003US-00720448.
 PR
 XX 03-DEC-2003; 2003US-00727780.
 PR
 XX 14-JAN-2004; 2004US-00757803.
 PR
 XX 10-FEB-2004; 2004US-0543480P.
 PR
 XX 13-FEB-2004; 2004US-00780447.
 PR
 XX 16-APR-2004; 2004US-00826966.
 PR
 XX 30-APR-2004; 2004WO-US013456.
 PR
 XX 24-MAY-2004; 2004WO-US016390.
 XX

PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
PR 14-FEB-2003; 2003WO-US004566.
PR 20-FEB-2003; 2003WO-US005028.
PR 20-FEB-2003; 2003WO-US005346.
PR 30-APR-2003; 2003US-00427160.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.
PR 10-FEB-2004; 2004US-0543480P.
PR 13-FEB-2004; 2004US-00780447.
PR 16-APR-2004; 2004US-00826966.
PR 30-APR-2004; 2004WO-US013456.
PR 24-MAY-2004; 2004WO-US016390.
XX (SIRN-) SIRNA THERAPEUTICS INC.
PA
XX
XX Richards I, Polisky B, Mcswiggen J;
XX WPI; 2005-457799/46.
XX
XX Novel chemically synthesized double stranded short interfering nucleic
PT acid molecule useful for cleaving interleukin 4 receptor RNA through RNA
PT interference.
XX
XX Claim 33; SEQ ID NO 589; 128pp; English.
XX
XX The invention relates to chemically synthesized short interfering nucleic
CC acids (siNAs) which downregulate expression of receptors for interleukin-
CC 4 (e.g., IL-4 receptor (IL-4R), IL-13 receptor (IL-13R) and IL-2 receptor
CC gamma (IL-2RG)) by RNA interference. The invention also relates to
CC similar siNAs which interfere with the expression of the ligands for
CC these receptors, namely IL-4 and IL-13. The siNAs of the invention may or
CC may not comprise ribonucleotides, can contain deoxyribonucleotides, can
CC be chemically modified and may be double or single stranded. They further
CC comprise sense and antisense regions, or alternatively are assembled from
CC a sense oligonucleotide and an antisense oligonucleotide. Specifically,
CC the siNAs include short interfering RNA (siRNA), double-stranded RNA,
CC micro-RNA (miRNA) and short hairpin RNA (shRNA). The invention also
CC relates to pharmaceutical compositions comprising an siNA targeted to
CC human IL-4R (RefSeq accession number NM 000418), IL-13R, IL-2RG, IL-4 or
CC IL-13, especially the siRNAs shown in AEB04245-AEB06055. The invention
CC further discloses expression vectors and host cells comprising an siNA of
CC the invention. The siNAs exhibit increased resistance to nuclease
CC degradation compared to the prior art. The siNAs of the invention can be
CC used to modulate expression of their target genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of interleukin-related
CC conditions. They may be used in the treatment of cancers and other
CC proliferative conditions, viral infection, inflammatory conditions,
CC autoimmune diseases, respiratory and pulmonary diseases (e.g., asthma,
CC chronic obstructive pulmonary disease (COPD), allergies), cardiovascular
CC diseases, neurological diseases, renal diseases, ocular diseases, liver
CC diseases, mitochondrial diseases, endocrine diseases, prion diseases and
CC reproduction-related conditions. The siNAs may also be used in drug
CC screening, diagnosis, therapeutic target identification and validation,
CC genetic engineering, pharmacogenomics, studying gene function, and gene
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
CC represents the antisense strand of a human IL-4R-targeted double-stranded
XX siRNA.
XX
XX Sequence 19 BP; 1 A; 4 C; 8 G; 0 T; 6 U; 0 Other;
SQ
Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 57.9%; Pred. No. 1.2e+03;
Matches 11; Conservative 6; Mismatches 2; Indels 0; Gaps 0;
QY 1280 GGGGGCTTTCACATATCCT 1298

Db 1 GGGGGCTTTCACATATCCT 19
RESULT 1531
AEC14670
ID AEC14670 standard; RNA; 19 BP.
XX
XX AEC14670;
XX
XX 20-OCT-2005 (first entry)
XX Human IL-4R siRNA antisense strand, SEQ ID:589.
XX
XX RNA interference; gene silencing; short interfering RNA; siRNA; cancer;
KW hyperproliferation; neoplasm; cytostatic; viral infection; infection;
KW virucide; inflammation; antiinflammatory; autoimmune disease;
KW immune disorder; immunosuppressive; pulmonary disease;
KW respiratory disease; respiratory-gen.; cardiovascular disease;
KW cardiovascular-gen.; neurological disease; neuroprotective;
KW renal disease; endocrine disease; genitourinary disease; nephrotropic;
KW endocrine-gen.; liver disease; gastrointestinal disease; hepatotropic;
KW ocular disease; ophthalmological; reproductive disorder; infertility;
KW antifertility; gynecology and obstetrics; andrology;
KW mitochondrial disease; prion disease; degeneration;
KW interleukin-4 receptor; IL-4 receptor; ss.
XX
XX Homo sapiens.
OS
XX US2005182007-A1.
XX
XX 18-AUG-2005.
XX
XX 20-AUG-2004; 2004US-00922675.
XX
XX 18-MAY-2001; 2001US-0292217P.
PR 20-JUL-2001; 2001US-0306883P.
PR 13-AUG-2001; 2001US-0311865P.
PR 20-FEB-2002; 2002US-0358580P.
PR 06-MAR-2002; 2002US-0362018P.
PR 11-MAR-2002; 2002US-0363124P.
PR 17-MAY-2002; 2002WO-US015876.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
PR 14-FEB-2003; 2003WO-US004566.
PR 20-FEB-2003; 2003WO-US005028.
PR 30-APR-2003; 2003WO-US005346.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.
PR 10-FEB-2004; 2004US-0543480P.
PR 13-FEB-2004; 2004US-00780447.
PR 16-APR-2004; 2004US-00826966.
PR 30-APR-2004; 2004WO-US013456.
PR 24-MAY-2004; 2004WO-US016390.
PR 09-JUN-2004; 2004US-00863973.
XX (SIRN-) SIRNA THERAPEUTICS INC.
PA
XX Mcswiggen J, Beigelman L;
XX WPI; 2005-581759/59.
XX
XX New chemically synthesized double stranded siNA molecule that directs
PT cleavage of an interleukin-13 receptor (IL-13R) RNA via RNA interference,
PT useful in preparing a composition for treating e.g., inflammatory
PT disorders.
PT

XX PS Claim 33; SEQ ID NO 589; 127pp; English.

XX CC The invention relates to chemically synthesized short interfering nucleic

CC acids (siNAs) which downregulate expression of receptors for interleukin-

CC 13 (e.g., IL-13 receptor (IL-13R), IL-4 receptor (IL-4R) and IL-2

CC receptor gamma (IL-2RG)) by RNA interference. The invention also relates

CC to similar siNAs which interfere with the expression of the ligands for

CC these receptors, namely IL-13 and IL-4. The siNAs of the invention may or

CC may not comprise ribonucleotides, can contain deoxyribonucleotides, can

CC be chemically modified and may be double or single stranded. They further

CC comprise sense and antisense regions, or alternatively are assembled from

CC a sense oligonucleotide and an antisense oligonucleotide. Specifically,

CC the siNAs include short interfering RNA (siRNA), double-stranded RNA,

CC micro-RNA (miRNA) and short hairpin RNA (shRNA). The invention also

CC relates to pharmaceutical compositions comprising a siNA targeted to

CC human IL-13R (e.g., IL-13R alpha 1 (IL13RA1)), see RefSeq accession number

CC NM_001560), IL-4R, IL-2RG, IL-4 or IL-13, especially the siRNAs shown in

CC AEC14082-AEC15892. The invention further discloses expression vectors and

CC host cells comprising a siNA of the invention. The siNAs exhibit

CC increased resistance to nuclease degradation compared to the prior art.

CC The siNAs of the invention can be used to modulate expression of their

CC target genes in cells, tissue explants or organisms (e.g., by ex vivo

CC gene therapy), or in grafts and transplants for the treatment of a

CC variety of interleukin-related conditions. They may be used in the

CC treatment of cancers and other proliferative conditions, viral infection,

CC inflammatory conditions, autoimmune diseases, respiratory and pulmonary

CC diseases (e.g., asthma, chronic obstructive pulmonary disease (COPD),

CC allergies), cardiovascular diseases, neurological diseases, renal

CC diseases, ocular diseases, liver diseases, mitochondrial diseases,

CC endocrine diseases, prion diseases and reproduction-related conditions.

CC The siNAs may also be used in drug screening, diagnosis, therapeutic

CC target identification and validation, genetic engineering,

CC pharmacogenomics, studying gene function, and gene mapping (e.g., of

CC single nucleotide polymorphisms). The present sequence represents the

CC antisense strand of a human IL-4R-targeted double-stranded siRNA. Note:

CC The sequence data for this patent is also available in electronic format

CC directly from the US patent office at

CC seqdata.uspto.gov/sequence.html?DocID=20050182007.

XX SQ Sequence 19 BP; 1 A; 4 C; 8 G; 0 T; 6 U; 0 Other;

Query Match 0.6%; Score 15.8; DB 1; Length 19;

Best Local Similarity 57.9%; Pred. No. 1.2e+03;

Matches 11; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

QY 1280 GGGGGCTTTCACATATCCT 1298

|||||:::|:::|:::|:::|:::|

Db 1 GGGGGCUUUGGCAUGUCCU 19

RESULT 1532

AEC14470/c

ID AEC14470 standard; RNA; 19 BP.

XX AC AEC14470;

XX XX

XX 20-OCT-2005 (first entry)

XX DE Human IL-4R transcript target sequence/siRNA sense strand, SEQ ID:389.

XX KW RNA interference; gene silencing; short interfering RNA; siRNA; cancer;

KW hyperproliferation; neoplasm; cytostatic; viral infection; infection;

KW virucide; inflammation; antiinflammatory; autoimmune disease;

KW immune disorder; immunosuppressive; pulmonary disease; disease;

KW respiratory disease; respiratory-gen.; cardiovascular disease;

KW cardiovascular-gen.; neurological disease; neuroprotective;

KW renal disease; endocrine disease; genitourinary disease; nephrotropic;

KW endocrine-gen.; liver disease; gastrointestinal disease; hepatotropic;

KW ocular disease; ophthalmological; reproductive disorder; infertility;

KW antiinfertility; gynecology and obstetrics; andrology;

KW mitochondrial disease; prion disease; degeneration;

KW interleukin-4 receptor; IL-4 receptor; ss.

XX OS Homo sapiens.

XX PN US2005182007-A1.

XX PD 18-AUG-2005.

XX PF 20-AUG-2004; 2004US-00922675.

XX PR 18-MAY-2001; 2001US-0292217P.

PR 20-JUL-2001; 2001US-0306883P.

PR 13-AUG-2001; 2001US-0311865P.

PR 20-FEB-2002; 2002US-0358860P.

PR 06-MAR-2002; 2002US-0362016P.

PR 11-MAR-2002; 2002US-0363124P.

PR 17-MAY-2002; 2002WO-US015876.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0409293P.

PR 15-JAN-2003; 2003US-0440129P.

PR 14-FEB-2003; 2003WO-US004566.

PR 20-FEB-2003; 2003WO-US005028.

PR 30-APR-2003; 2003US-00427160.

PR 23-MAY-2003; 2003US-00444853.

PR 24-NOV-2003; 2003US-00693059.

PR 20-FEB-2003; 2003US-00720448.

PR 14-JAN-2004; 2004US-00757803.

PR 10-FEB-2004; 2004US-0543480P.

PR 13-FEB-2004; 2004US-00780447.

PR 16-APR-2004; 2004US-00826966.

PR 30-APR-2004; 2004WO-US013456.

PR 24-MAY-2004; 2004WO-US016390.

PR 09-JUN-2004; 2004US-00863973.

XX (SIRN-) SIRNA THERAPEUTICS INC.

XX PI Mcswiggen J, Beigelman L;

XX WPI; 2005-581759/59.

DR New chemically synthesized double stranded siNA molecule that directs

PT cleavage of an Interleukin-13 receptor (IL-13R) RNA via RNA interference,

PT useful in preparing a composition for treating e.g., inflammatory

PT disorders.

XX PS Claim 33; SEQ ID NO 389; 127pp; English.

XX CC The invention relates to chemically synthesized short interfering nucleic

CC acids (siNAs) which downregulate expression of receptors for interleukin-

CC 13 (e.g., IL-13 receptor (IL-13R), IL-4 receptor (IL-4R) and IL-2

CC receptor gamma (IL-2RG)) by RNA interference. The invention also relates

CC to similar siNAs which interfere with the expression of the ligands for

CC these receptors, namely IL-13 and IL-4. The siNAs of the invention may or

CC may not comprise ribonucleotides, can contain deoxyribonucleotides, can

CC be chemically modified and may be double or single stranded. They further

CC comprise sense and antisense regions, or alternatively are assembled from

CC a sense oligonucleotide and an antisense oligonucleotide. Specifically,

CC the siNAs include short interfering RNA (siRNA), double-stranded RNA,

CC micro-RNA (miRNA) and short hairpin RNA (shRNA). The invention also

CC relates to pharmaceutical compositions comprising a siNA targeted to

CC human IL-13R (e.g., IL-13R alpha 1 (IL13RA1)), see RefSeq accession number

CC NM_001560), IL-4R, IL-2RG, IL-4 or IL-13, especially the siRNAs shown in

CC AEC14082-AEC15892. The invention further discloses expression vectors and

CC host cells comprising a siNA of the invention. The siNAs exhibit

CC increased resistance to nuclease degradation compared to the prior art.

CC The siNAs of the invention can be used to modulate expression of their

CC target genes in cells, tissue explants or organisms (e.g., by ex vivo

CC gene therapy), or in grafts and transplants for the treatment of a

CC variety of interleukin-related conditions. They may be used in the

CC treatment of cancers and other proliferative conditions, viral infection,

CC inflammatory conditions, autoimmune diseases, respiratory and pulmonary
CC diseases (e.g., asthma, chronic obstructive pulmonary disease (COPD),
CC allergies), cardiovascular diseases, neurological diseases, renal
CC diseases, ocular diseases, liver diseases, mitochondrial diseases,
CC endocrine diseases, prion diseases and reproduction-related conditions.
CC The siRNAs may also be used in drug screening, diagnosis, therapeutic
CC target identification and validation, genetic engineering,
CC pharmacogenomics, studying gene function, and gene mapping (e.g., of
CC single nucleotide polymorphisms). The present sequence represents the
CC sense strand of a human IL-4R-targeted double-stranded siRNA, which is
CC identical to the human IL-4R transcript target sequence. Note: The
CC sequence data for this patent is also available in electronic format
CC directly from the US patent office at
CC seqdata.uspto.gov/sequence.html?DocID=20050182007.
XX
XX
XX Sequence 19 BP; 6 A; 8 C; 4 G; 0 T; 1 U; 0 Other;
XX
XX
Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1280 GGGGGCTTTGACATATCCT 1298
Db 19 GGGGGCTTTGGCATGTCCT 1
RESULT 1533
AEC06427
ID AEC06427 standard; RNA; 19 BP.
XX
XX AEC06427;
XX
XX
DT 20-OCT-2005 (first entry)
XX
DE NOGO receptor target region/siRNA molecule sense strand, SEQ ID 99.
XX
XX NOGO receptor; RNA interference; gene silencing; neuroprotective;
KW NOGO receptor; RNA interference; gene silencing; neuroprotective;
KW gene therapy; neurological disease; short interfering RNA; siRNA; ss.
XX
XX Synthetic.
XX
XX US2005182008-A1.
XX
XX 18-AUG-2005.
XX
XX 20-AUG-2004; 2004US-00923142.
XX
XX 11-FEB-2000; 2000US-0181797P.
PR 09-FEB-2001; 2001US-00780533.
PR 09-FEB-2001; 2001WO-US004273.
PR 05-APR-2001; 2001US-00827395.
PR 18-MAY-2001; 2001US-0292217P.
PR 20-JUL-2001; 2001US-0306883P.
PR 13-AUG-2001; 2001US-0311865P.
PR 20-FEB-2002; 2002US-0362016P.
PR 11-MAR-2002; 2002US-0363124P.
PR 03-APR-2002; 2002WO-US010512.
PR 17-MAY-2002; 2002WO-US015876.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
PR 20-FEB-2003; 2003WO-US005028.
PR 20-FEB-2003; 2003WO-US005346.
PR 30-APR-2003; 2003US-00427160.
PR 06-MAY-2003; 2003US-00436882.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.

PR 10-FEB-2004; 2004US-0543480P.
PR 13-FEB-2004; 2004US-00780447.
PR 16-APR-2004; 2004US-00826966.
PR 30-APR-2004; 2004WO-US013456.
PR 24-MAY-2004; 2004WO-US016390.
XX
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Mcswiggen J, Chowrira BM, Haerberli P;
XX
XX WPI; 2005-581760/59.
XX
XX New chemically synthesized double stranded siNA molecule that directs
XX cleavage of a NOGO receptor RNA via RNA interference, useful in preparing
XX a composition for treating e.g., neurological disorders.
XX
XX Claim 33; SEQ ID NO 99; 192pp; English.
XX
XX The invention relates to a novel chemically synthesized double stranded
XX short interfering nucleic acid (siNA) molecule which directs cleavage of
XX a NOGO receptor RNA via RNA interference (RNAi). Each strand of the siNA
XX molecule is 18-23 nucleotides in length. One strand of the siNA molecule
XX comprises a nucleotide sequence having sufficient complementarity to the
XX NOGO receptor RNA. The siNA molecules include short interfering RNA
XX (siRNA), double-stranded RNA (dsRNA), micro-RNA (miRNA) and short hairpin
XX molecules (shRNA). The invention also includes a composition comprising
XX the siNA molecule in a carrier or diluent. The siNA molecules have
XX neuroprotective activity and may be useful in gene therapy. The double
XX stranded siNA molecules are useful in preparing a composition for
XX treating NOGO receptor-associated disorders, e.g. neurological disorders.
XX This sequence represents a sense strand/NOGO receptor target region of an
XX siRNA molecule of the invention.
XX
XX Sequence 19 BP; 14 A; 1 C; 0 G; 0 T; 4 U; 0 Other;
XX
XX
Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 1.2e+03;
Matches 15; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
QY 2705 TACTAAAAA AAAAAAAAAA 2723
Db 1 UUCUUA AAAAAAAAAA 19
RESULT 1534
AEC06526/C
ID AEC06526 standard; RNA; 19 BP.
XX
XX AEC06526;
XX
XX 20-OCT-2005 (first entry)
XX
XX NOGO receptor siRNA molecule antisense strand, SEQ ID 198.
DE NOGO receptor; RNA interference; gene silencing; neuroprotective;
KW NOGO receptor; RNA interference; gene silencing; neuroprotective;
KW gene therapy; neurological disease; short interfering RNA; siRNA; ss.
XX
XX Synthetic.
XX
XX US2005182008-A1.
XX
XX 18-AUG-2005.
XX
XX 20-AUG-2004; 2004US-00923142.
XX
XX 11-FEB-2000; 2000US-0181797P.
PR 09-FEB-2001; 2001US-00780533.
PR 09-FEB-2001; 2001WO-US004273.
PR 05-APR-2001; 2001US-00827395.
PR 18-MAY-2001; 2001US-0292217P.
PR 20-JUL-2001; 2001US-0306883P.
PR 13-AUG-2001; 2001US-0311865P.
PR 20-FEB-2002; 2002US-0362016P.
PR 11-MAR-2002; 2002US-0363124P.
PR 03-APR-2002; 2002WO-US010512.
PR 17-MAY-2002; 2002WO-US015876.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
PR 20-FEB-2003; 2003WO-US005028.
PR 20-FEB-2003; 2003WO-US005346.
PR 30-APR-2003; 2003US-00427160.
PR 06-MAY-2003; 2003US-00436882.
PR 23-MAY-2003; 2003US-00444853.
PR 23-OCT-2003; 2003US-00693059.
PR 24-NOV-2003; 2003US-00720448.
PR 03-DEC-2003; 2003US-00727780.
PR 14-JAN-2004; 2004US-00757803.


```
DE Human NOGO receptor siRNA SEQ ID NO 198.
XX CNS-gen.; neuroprotective; nootropic; cerebroprotective; vasotropic;
KW antisense therapy; gene expression; neurological disease;
KW nervous system injury; cerebrovascular ischemia; Alzheimers disease;
KW dementia; multiple sclerosis; NOGO receptor; siRNA;
KW short interfering RNA; RNA interference; gene silencing; ss.
XX Homo sapiens.
XX WO2005045035-A2.
XX 19-MAY-2005.
XX 20-AUG-2004; 2004WO-US025930.
XX 23-OCT-2003; 2003US-00693059.
XX 24-NOV-2003; 2003US-00720448.
XX 03-DEC-2003; 2003US-00727780.
XX 14-JAN-2004; 2004US-00757803.
XX 10-FEB-2004; 2004US-0543480P.
XX 13-FEB-2004; 2004US-00780447.
XX 16-APR-2004; 2004US-00826966.
XX 30-APR-2004; 2004WO-US013456.
XX 24-MAY-2004; 2004WO-US016390.
XX (SIRN-) SIRNA THERAPEUTICS INC.
XX Mcswiggen J, Chowrira BM, Haerberli P;
XX WPI; 2005-746892/76.
XX Novel chemically synthesized double-stranded short interfering nucleic
PT acid molecule directing cleavage of NOGO (Neurite outgrowth inhibitor)
PT receptor RNA through RNA interference, useful in treating Alzheimer's
PT disease or dementia.
XX Claim 33; SEQ ID NO 198; 206pp; English.
XX The invention describes a chemically synthesized double-stranded short
CC interfering nucleic acid (siNA) molecule (I) directing cleavage of NOGO
CC receptor RNA through RNA interference (RNAi), where each strand of the
CC molecule is 18-23 nucleotides in length, and one strand of the molecule
CC comprises nucleotide sequence having sufficient complementarity to the
CC NOGO receptor RNA for the siNA molecule to direct cleavage of the NOGO
CC receptor RNA through RNAi. Also described is a composition comprising (I)
CC together with a carrier or diluent. (I) is useful for downregulation or
CC inhibition of expression of NOGO and/or NOGO receptor proteins arising
CC from NOGO and/or NOGO receptor haplotype polymorphism that are associated
CC with a disease or condition (e.g., neurologic diseases, disorders and/or
CC conditions). (I) is useful for treating or preventing central nervous
CC system (CNS) injury, cerebrovascular accident (CVA), stroke, Alzheimer's
CC disease, dementia or multiple sclerosis. (I) is useful as reagents in ex
CC vivo applications e.g., in tissue or cells that are transplanted into a
CC subject for therapeutic effect. This sequence represents a NOGO receptor
CC siRNA.
XX Sequence 19 BP; 4 A; 0 C; 1 G; 0 T; 14 U; 0 Other;
Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2705 TACTAAAAAATAAAAAA 2723
Db 19 TTCTTAAAAAATAAAAAA 1
RESULT 1537
AEF14493
ID AEF14493 standard; DNA; 19 BP.
XX
XX AEF14493;
```

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XX 09-MAR-2006 (first entry)
XX Human chondrocyte anabolic stimulation target DNA SEQ ID NO 352.
XX Osteopathic; Nootropic; Neuroprotective; Dermatological;
KW Antiinflammatory; Antiarthritic; Antiarthritic; musculoskeletal disease;
KW chondrocyte anabolic stimulator; ss.
XX Homo sapiens.
XX WO2005124342-A2.
XX 29-DEC-2005.
XX 21-JUN-2005; 2005WO-EP052875.
XX 21-JUN-2004; 2004US-0581568P.
XX (GALA-) GALAPAGOS NV.
XX Vandeghinste N, Tomme PHM, Michiels F, Ma L, Mille-Baker B;
PI Van Es HHG;
XX WPI; 2006-067565/07.
XX Identifying a compound that induces chondrocyte anabolic stimulation,
PT useful for treating osteoarthritis, comprises measuring a compound-
PT polypeptide property related to the anabolic stimulation of chondrocytes.
XX Example 4; SEQ ID NO 352; 179pp; English.
XX The invention relates to a method of identifying a compound that induces
CC chondrocyte anabolic stimulation. The methods and agent are useful for
CC treating and/or preventing a disease involving a systemic or local
CC decrease in cartilage, e.g. osteoarthritis, rheumatoid arthritis,
CC psoriatic arthritis, juvenile rheumatoid arthritis, gouty arthritis,
CC septic or infectious arthritis, reactive arthritis, reflex sympathetic
CC dystrophy, algodystrophy, Tietze syndrome or costal chondritis,
CC fibromyalgia, osteochondritis neurogenic or neuropathic arthritis,
CC arthropathy, osteoarthritis deformans endemica, Mseleini disease,
CC Handigodu disease, degeneration resulting from fibromyalgia, systemic
CC lupus erythematosus, scleroderma, ankylosing spondylitis, hereditary
CC chondrolysis, chondrodysplasias, pseudochondrodysplasias, microtia,
CC anoxia and metaphyseal chondrodysplasia. The agent is useful in the
CC manufacture of a medicament for the treating and/or preventing a disease
CC involving a decrease in mean cartilage thickness, e.g. osteoarthritis,
CC hypercalcaemia of malignancy, multiple myelomatosis, hyperparathyroidism,
CC and hyperthyroidism. The present sequence represents a human chondrocyte
CC anabolic stimulation associated target DNA.
XX Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 15.8; DB 1; Length 19;
Best Local Similarity 89.5%; Pred. No. 1.2e+03;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2435 CTGAAGAGCAGGAGCTGC 2453
Db 1 CTGAAGAGCAGGAGCTGC 19
RESULT 1538
AAV19118/c
ID AAV19118 standard; DNA; 17 BP.
XX
XX AAV19118;
XX 28-AUG-1998 (first entry)
XX Anchored oligo(T) primer.
XX Secreted apoptosis-related protein; SARP; mSARPI; mouse; prostate cancer;
```


KW breast cancer; diagnosis; gene therapy; PCR; primer; ss.
 OS Synthetic.
 XX WO9813493-A2.
 FN
 PD 02-APR-1998.
 XX
 PF 24-SEP-1997; 97WO-US017154.
 XX
 PR 24-SEP-1996; 96US-0026603P.
 PR 11-OCT-1996; 96US-0028363P.
 XX
 PA (LXRB-) LXR BIOTECHNOLOGY INC.
 XX
 PI Umansky S, Melkonyan H;
 XX
 DR WPI; 1998-230704/20.
 XX
 XX New secreted apoptosis-related proteins - useful for modulating
 PT apoptosis, particularly for treatment of prostatic or breast cancer, also
 PT for diagnosis and monitoring of disease.
 XX
 PS Example 1; Page 30; 101pp; English.
 XX
 CC This oligo(T) synthetic oligonucleotide was used for first strand cDNA
 CC synthesis from total RNA isolated from either logarithmically growing or
 CC quiescent 10T1/2 mouse fibroblast cells. It was also used with an
 CC arbitrary d(N10) primer in PCR. The PCR products were used in a
 CC differential display to identify the msRPI gene (see AAV19112) that
 CC codes for novel murine secreted apoptosis-related protein msRPI (see
 CC AAW37814). The invention relates to SARP polynucleotides (see also
 CC AAV19113-15) and polypeptides (see also AAW37815-17), antibodies specific
 CC for SARP, and use of such polynucleotides and antibodies in diagnostic
 CC and therapeutic methods, and methods for treating diseases related to the
 CC regulation of SARP expression in tissue and body fluid samples, including
 CC cancers
 XX
 SQ Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;
 Query Match 0.6%; Score 15.6; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 1.2e+03;
 Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 2707 CTRAAAAAAAAAAAAA 2723
 Db 17 SNAAAAAAAAAAAAAA 1
 RESULT 1539
 AA289372/c
 ID AA289372 standard; DNA; 17 BP.
 XX
 AC AA289372;
 XX
 DT 15-JUN-2000 (first entry)
 XX
 DE RNA detecting primer #2.
 XX
 KW Amplification; detection; gene expression; primer; ss.
 XX
 OS Unidentified.
 XX
 PN DE19840731-A1.
 XX
 PD 09-MAR-2000.
 XX
 PF 07-SEP-1998; 98DE-01040731.
 XX
 PR 07-SEP-1998; 98DE-01040731.
 XX
 PA (HMRI) HOECHST MARION ROUSSEL DEUT GMBH.
 XX

DR WPI; 2000-257789/23.
 XX
 PT Analysis of RNA samples, useful for detection of differential gene
 PT expression uses two differently labeled primers.
 XX
 PS Disclosure; Page 10; 10pp; German.
 XX
 CC This invention describes a novel method for analysis of an RNA sample
 CC which comprises amplifying cDNA with first and second differently labeled
 CC primers and analysis of the amplified labeled cDNA. The method is useful
 CC for analyzing differential gene expression, for identifying and/or
 CC characterizing pharmacological activities or for identifying target
 CC genes. The use of different primer combinations allow more cDNAs to be
 CC amplified. The method also provides a more detailed analysis than prior
 CC art methods. This sequence represents a primer used to illustrate the
 CC method of the invention
 XX
 SQ Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;
 Query Match 0.6%; Score 15.6; DB 1; Length 17;
 Best Local Similarity 93.8%; Pred. No. 1.2e+03;
 Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 2708 TAAAAAAAAAAAAA 2723
 Db 16 KAAAAAAAAAAAAA 1
 RESULT 1540
 AA25453/c
 ID AA25453 standard; DNA; 17 BP.
 XX
 AC AA25453;
 XX
 DT 19-JUL-2000 (first entry)
 XX
 DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1951.
 XX
 KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
 KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
 KW gene expression modification; cancer; phosphorothioate; endonuclease;
 KW anticancer; breast cancer; endometrium cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO954459-A2.
 XX
 PD 28-OCT-1999.
 XX
 PF 19-APR-1999; 99WO-US008547.
 XX
 PR 20-APR-1998; 98US-0082404P.
 PR 23-JUN-1998; 98US-00103636.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
 PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haeberli P;
 PI Matulic-Adamic J;
 XX
 DR WPI; 2000-013248/01.
 XX
 PT New nucleic acids that interact, and optionally cleave, target sequences,
 PT used to treat cancer.
 XX
 PS Claim 77; Page 79; 148pp; English.
 XX
 CC The present invention describes nucleic acids (A) that interact stably
 CC with a target sequence and contain at least one phosphorodi)thioate
 CC link, having endonuclease activity. (A), and more generally any catalytic
 CC nucleic acid (A') that modulates expression of the oestrogen receptor
 CC gene, are used to treat cancer (particularly of breast or endometrium),
 CC in vivo or by transforming cells ex vivo and implanting treated cells, or

CC for other conditions associated with levels of oestrogen receptor.
 CC Because of the high selectivity for targeted RNA, (A) can also be used to
 CC correlate inhibition of gene expression with alterations in phenotype,
 CC particularly for identification of therapeutic targets, and as research
 CC reagents (for RNA, in the same way that restriction endonucleases are
 CC used with DNA). The combination of modifications in (A) improves
 CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
 CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
 CC AAA25993 to AAA25992 represent their corresponding target sequences.
 CC AAA24748 to AAA26105 represent oestrogen receptor hairpin ribozyme
 CC sequences, and AAA26107 to AAA26218 represent their corresponding target
 CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
 CC antisense oligonucleotides used in the exemplification of the present
 CC invention
 XX
 XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
 SQ

Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2705 TACTAAAAA AAAA 2721
 ||| |||||
 Db 17 TACAAAAA AAAA 1

RESULT 1541
 AAA25452/c
 ID AAA25452 standard; DNA; 17 BP.
 XX
 AC AAA25452;
 DT 19-JUL-2000 (first entry)
 DE
 DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1950.
 XX
 XX Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
 KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
 KW gene expression modification; cancer; phosphorothioate; endonuclease;
 KW anticancer; breast cancer; endometrium cancer; ss.
 XX
 XX Homo sapiens.
 XX
 XX WO9544459-A2.
 XX
 XX 28-OCT-1999.
 XX
 XX 19-APR-1999; 99WO-US008547.
 XX
 XX 20-APR-1998; 98US-0082404P.
 PR 23-JUN-1998; 98US-00103636.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 PA
 XX Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
 PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haeblerl P;
 PI Matulich-Adamic J;
 XX
 XX WPI; 2000-013248/01.
 DR
 XX New nucleic acids that interact, and optionally cleave, target sequences,
 PT used to treat cancer.
 PT
 XX Claim 77; Page 79; 149pp; English.
 PS
 XX The present invention describes nucleic acids (A) that interact stably
 CC with a target sequence and contain at least one phosphorodithioate
 CC link, having endonuclease activity. (A), and more generally any catalytic
 CC nucleic acid (A') that modulates expression of the oestrogen receptor
 CC gene, are used to treat cancer (particularly of breast or endometrium),
 CC in vivo or by transforming cells ex vivo and implanting treated cells, or
 CC for other conditions associated with levels of oestrogen receptor.
 CC Because of the high selectivity for targeted RNA, (A) can also be used to

CC correlate inhibition of gene expression with alterations in phenotype,
 CC particularly for identification of therapeutic targets, and as research
 CC reagents (for RNA, in the same way that restriction endonucleases are
 CC used with DNA). The combination of modifications in (A) improves
 CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
 CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
 CC AAA25993 to AAA25992 represent their corresponding target sequences.
 CC AAA24748 to AAA26105 represent oestrogen receptor hairpin ribozyme
 CC sequences, and AAA26107 to AAA26218 represent their corresponding target
 CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
 CC antisense oligonucleotides used in the exemplification of the present
 CC invention
 XX
 XX Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;
 SQ

Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAA AAAA 2722
 ||| |||||
 Db 17 ACAAAAA AAAA 1

RESULT 1542
 ABA91530/c
 ID ABA91530 standard; DNA; 17 BP.
 XX
 AC ABA91530;
 XX
 XX 23-APR-2002 (first entry)
 DT
 DE DNA-RNA-DNA oligonucleotide AGT02014 used to test RNase H cleavage.
 XX
 KW DNA-RNA hybrid; RNase H; nucleic acid detection; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH misc_RNA 8
 FT /*tag= a
 FT /label= RNA
 FT
 XX WO200206531-A2.
 XX
 XX 24-JAN-2002.
 PD
 XX 12-JUL-2001; 2001WO-US022166.
 PF
 XX 14-JUL-2000; 2000US-00616761.
 PR 30-MAR-2001; 2001US-00823647.
 PR
 XX (GENE-) APPLIED GENE TECHNOLOGIES INC.
 PA
 XX Dattagupta N;
 PI
 XX WPI; 2002-171819/22.
 DR
 XX Probes for detecting target nucleotide sequence in sample, has sequence
 PT that forms hairpin structure having a double-stranded segment and single-
 PT stranded loop collectively forming region complementary to target
 PT sequence.
 XX
 XX Example 4; Page 49; 72pp; English.
 PS
 XX The present sequence is that of DNA-RNA-DNA hybrid oligonucleotide
 CC AGT02014. This is one of a set of oligonucleotides (see ABA91527-30) used
 CC to assess the minimum number of ribonucleotides in DNA-RNA chimeric
 CC oligonucleotides required for RNase H cleavage. Each oligonucleotide of
 CC the set had a different number of ribonucleotides, 1 in the present case.
 CC The oligonucleotides were mixed with target DNA oligonucleotide AGT02009
 CC (see ABA91531) and incubated with RNase H (5 U/ml) at 37 degrees C for 30
 CC minutes. The results showed that 4 ribonucleotides were the minimum

CC number for RNA cleavage. The invention provides probes for nucleic acid
 CC hybridisation. The probes form a hairpin structure comprising a double-
 CC stranded stem and a single-stranded loop, and are capable of both
 CC intramolecular and intermolecular hybridisation. The double-stranded stem
 CC may comprise a methylphosphonate DNA:RNA hybrid that is resistant to
 CC RNase H cleavage. When the probe hybridises with a target DNA, the RNA
 CC strand in the DNA:RNA duplex becomes sensitive to RNase H treatment and
 CC can be removed. Arrays and methods for nucleic acid hybridisation using
 CC the probes are provided

XX SQ Sequence 17 BP; 1 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
 |||||

Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1543
 AAD44151/C
 ID AAD44151 standard; DNA; 17 BP.
 XX AC AAD44151;
 XX 13-DEC-2002 (first entry)
 XX DT
 XX DE Oligo-AT PCR primer #2 used to illustrate the method of the invention.
 XX KW Sequential consensus region-directed amplification; gene expression;
 XX KW disease diagnosis; gene analysis; human; matrix metalloproteinase; PCR;
 XX KW primer; ss.
 XX OS Unidentified.
 XX XX
 XX PN US6277571-B1.
 XX XX
 XX PD 21-AUG-2001.
 XX XX
 XX PF 30-SEP-1998; 98US-00163485.
 XX XX
 XX PR 03-OCT-1997; 97US-00943162.
 XX PR 03-OCT-1997; 97US-0108152P.
 XX XX
 XX PA (UUVI-) UNIV VIRGINIA COMMONWEALTH INTELLECTUAL.
 XX XX
 XX PI Fillmore H, Broadus W, Gillies G;
 XX XX
 XX DR WPI; 2002-412824/44.
 XX XX
 XX PT Sequential consensus region-directed amplification for sorting mixture of
 XX PT DNAs into 2 or more subsets or distinguishing gene expression patterns in
 XX PT 2 samples, useful for disease diagnosis and gene analysis.
 XX XX
 XX PS Example; Fig 1D; 19pp; English.
 XX XX
 XX CC The invention relates to a method of sequential consensus region-directed
 XX CC amplification for sorting a mixture of DNAs into 2 or more subsets or
 XX CC distinguishing gene expression patterns in 2 samples. The methods, kits
 XX CC and oligonucleotides are useful for sorting a mixture of DNAs into 2 or
 XX CC more subsets or distinguishing gene expression patterns in 2 samples e.g.
 XX CC for disease diagnosis and gene analysis. The present sequence is oligo AT
 XX CC PCR primer used to illustrate the method of the invention

XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 16 T; 0 U; 1 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725

Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1544
 ADB04269/C
 ID ADB04269 standard; DNA; 17 BP.
 XX AC ADB04269;
 XX 20-NOV-2003 (first entry)
 XX DT
 XX DE Human MD27 scanning oligonucleotide SEQ ID 5255.
 XX KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
 XX KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
 XX KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
 XX KW developmental disorder; ss.
 XX OS Homo sapiens.
 XX PN EP1281758-A2.
 XX PD 05-FEB-2003.
 XX PF 30-JUL-2002; 2002EP-00016874.
 XX PR 02-AUG-2001; 2001US-00922181.
 XX PA (AEOM-) AEOMICA INC.
 XX PI Shannon M, Gu Y, Nguyen C;
 XX DR WPI; 2003-423107/40.
 XX PT New zinc finger-containing proteins and nucleic acids, useful in
 XX PT manufacturing a medicament for treating or preventing a disorder
 XX PT associated with decreased or increased expression or activity of MD23,
 XX PT MD24, MD27 or MD212, e.g. cancer.
 XX PS Example 8; SEQ ID NO 5255; 103pp; English.
 XX CC The present invention relates to novel human zinc finger-containing
 XX CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
 XX CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
 XX CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
 XX CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
 XX CC or in manufacturing a medicament for treating or preventing a disorder
 XX CC associated with decreased or increased expression or activity of MD23,
 XX CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
 XX CC acids and proteins are also useful for diagnosing or monitoring a disease
 XX CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
 XX CC acids can also be used as probes to detect and characterize gross
 XX CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
 XX CC useful in constructing microarrays for measuring gene expression. The
 XX CC proteins are useful as therapeutic agents for gene therapy or as
 XX CC vaccines. The present sequence was used to illustrate the invention.

XX SQ Sequence 17 BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
 |||||

Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1545
 ADB04273/C
 ID ADB04273 standard; DNA; 17 BP.
 XX

```
AC ADB04273;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MD27 scanning oligonucleotide SEQ ID 5259.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX
XX 30-JUL-2002; 2002EP-00016874.
XX
XX 02-AUG-2001; 2001US-00922181.
XX (AEOM-) AEOMICA INC.
XX
XX Shannon M, Gu Y, Nguyen C;
XX
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27 or MD212, e.g. cancer.
XX
XX Example 8; SEQ ID NO 5259; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAAAAAA 2724
DB 17 TCAAAAAAAAAAAAAAAAAA 1

RESULT 1546
ADB04274/c
ID ADB04274 standard; DNA; 17 BP.
XX
XX ADB04274;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MD27 scanning oligonucleotide SEQ ID 5260.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX
XX 30-JUL-2002; 2002EP-00016874.
XX
XX 02-AUG-2001; 2001US-00922181.
XX (AEOM-) AEOMICA INC.
XX
XX Shannon M, Gu Y, Nguyen C;
XX
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27 or MD212, e.g. cancer.
XX
XX Example 8; SEQ ID NO 5259; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 1 A; 0 C; 1 G; 15 T; 0 U; 0 Other;
```

```
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX
XX 30-JUL-2002; 2002EP-00016874.
XX
XX 02-AUG-2001; 2001US-00922181.
XX (AEOM-) AEOMICA INC.
XX
XX Shannon M, Gu Y, Nguyen C;
XX
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27 or MD212, e.g. cancer.
XX
XX Example 8; SEQ ID NO 5260; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MD23,
XX MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 1 A; 0 C; 2 G; 14 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAAAAA 2723
DB 17 CTCAAAAAATAAAAAAAAA 1

RESULT 1547
ADB04270/c
ID ADB04270 standard; DNA; 17 BP.
XX
XX ADB04270;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MD27 scanning oligonucleotide SEQ ID 5256.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
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XX PF 30-JUL-2002; 2002EP-00016874.
XX DR
XX PR 02-AUG-2001; 2001US-00922181.
XX PA (ABOM-) ABOMICA INC.
XX PI Shannon M, Gu Y, Nguyen C;
XX DR WPI; 2003-423107/40.
XX
XX PT New zinc finger-containing proteins and nucleic acids, useful in
XX PT manufacturing a medicament for treating or preventing a disorder
XX PT associated with decreased expression or activity of MD23,
XX PT MD24, MD27 or MD212, e.g. cancer.
XX PS Example 8; SEQ ID NO 5256; 103pp; English.
XX
XX CC The present invention relates to novel human zinc finger-containing
XX CC proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is
XX CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
XX CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
XX CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
XX CC or in manufacturing a medicament for treating or preventing a disorder
XX CC associated with decreased or increased expression or activity of MD23,
XX CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
XX CC acids and proteins are also useful for diagnosing or monitoring a disease
XX CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
XX CC acids can also be used as probes to detect and characterize gross
XX CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
XX CC useful in constructing microarrays for measuring gene expression. The
XX CC proteins are useful as therapeutic agents for gene therapy or as
XX CC vaccines. The present sequence was used to illustrate the invention.
XX
XX SQ Sequence 17:BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2709 AAAAAAAAAAAAAAAAAA 2725
DB 17 AAAAAAAAAAAAAAAAAA 1
RESULT 1548
ABZ61225/c
ID ABZ61225 standard; RNA; 17 BP.
XX
XX AC ABZ61225;
XX
XX DT 21-MAR-2003 (first entry)
XX
XX DE Human H-Ras DNase target #16.
XX
XX KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
XX KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
XX KW anti-rheumatic; cancer; AIDS; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200297114-A2.
XX
XX PD 05-DEC-2002.
XX
XX PF 29-MAY-2002; 2002WO-US016840.
XX
XX PR 29-MAY-2001; 2001US-0294140P.
XX PR 06-JUN-2001; 2001US-0296249P.
XX PR 10-SEP-2001; 2001US-0318471P.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX
XX PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX DR WPI; 2003-058513/05.
XX

```

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PI Mcswiggen J;
XX
XX DR WPI; 2003-140484/13.
XX
XX PT Novel short interfering RNA and enzymatic nucleic acid useful for
XX PT treating cancer, modulates the expression of a nucleic acid encoding
XX PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX PS Claim 58; Page 111; 185pp; English.
XX
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
XX CC acid molecule or an enzymatic nucleic acid molecule, that modulates
XX CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
XX CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
XX CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
XX CC rheumatic activity. The nucleic acid molecules are useful for reducing
XX CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
XX CC also useful for treating breast, ovarian, colorectal, lung, prostate,
XX CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
XX CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
XX CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
XX CC ribozymes of the invention
XX
XX SQ Sequence 17 BP; 2 A; 4 C; 8 G; 0 T; 3 U; 0 Other;
Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1737 ACCTGAGGCCCTCCCTG 1753
DB 17 ACCAGAGGCCCTCCCTG 1
RESULT 1549
ADL49408/c
ID ADL49408 standard; RNA; 17 BP.
XX
XX AC ADL49408;
XX
XX DT 20-MAY-2004 (first entry)
XX
XX DE Human PKR substrate sequence #522.
XX
XX KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
XX KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
XX KW protein kinase PKR; cerebrovascular accident;
XX KW central nervous system injury; CNS injury; spinal cord injury; cancer;
XX KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
XX KW restenosis; asthma; Crohn's disease; diabetes; obesity;
XX KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
XX KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
XX KW allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
XX KW substrate; ds.
XX
XX OS Unidentified.
XX
XX PN WO200281628-A2.
XX
XX PD 17-OCT-2002.
XX
XX PF 03-APR-2002; 2002WO-US010512.
XX
XX PR 05-APR-2001; 2001US-00827395.
XX PR 29-MAY-2001; 2001US-0294412P.
XX PR 28-AUG-2001; 2001US-0315315P.
XX
XX PA (RIBO-) RIBOZYME PHARM INC.
XX
XX PI Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;
XX DR WPI; 2003-058513/05.
XX

```

PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.

XX
XX
PS Claim 59; SEQ ID NO 2941; 317pp; English.

XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human PKR
CC substrate sequence.

XX
SQ Sequence 17 BP; 1 A; 1 C; 0 G; 0 T; 15 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2724

Db 17 TAAAAAAAAAAAAAAAAA 1

RESULT 1550

ADL49407/c

ID ADL49407 standard; RNA; 17 BP.

AC ADL49407;

XX 20-MAY-2004 (first entry)

XX Human PKR substrate sequence #521.

XX antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; human PKR;
KW substrate; ds.

XX Unidentified.

XX WO200281628-A2.

XX 17-OCT-2002.

XX 03-APR-2002; 2002WO-US010512.

XX 05-APR-2001; 2001US-00827395.

PR 29-MAY-2001; 2001US-0294412P.

PR 28-AUG-2001; 2001US-0315315P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Blatt L, Chowrira B, Haerberli P, Mcswiggen J, Fosnaugh K;

XX WPI; 2003-058513/05.

PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.

XX
XX
PS Claim 59; SEQ ID NO 2940; 317pp; English.

XX The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the
CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human PKR
CC substrate sequence.

XX
SQ Sequence 17 BP; 0 A; 1 C; 0 G; 0 T; 16 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;

Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725

Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1551

ADP86140/c

ID ADP86140 standard; DNA; 17 BP.

AC ADP86140;

XX 09-SEP-2004 (first entry)

XX CpG immunostimulatory oligonucleotide #11.

XX CpG immunostimulatory oligonucleotide; immune response; allergy; asthma;
KW viral infection; bacterial infection; cancer; lymphoma; Hodgkin's lymphoma;
KW intraepithelial neoplasm; melanoma; neuroblastoma; phosphorothioate; ss.

XX Unidentified.

XX Key Location/Qualifiers
FH modified_base 1..17

FT /tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone"

XX WO2004053104-A2.

XX 24-JUN-2004.

XX 11-DEC-2003; 2003WO-US039775.

XX 11-DEC-2002; 2002US-0432409P.

PR 25-SEP-2003; 2003US-0506108P.

XX (COLE-) COLEY PHARM GROUP INC.

XX (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Jurk M, Vollmer J, Uhlmann E;

XX WPI; 2004-487902/46.

```

PT New oligonucleotides, useful for treating allergy or asthma, viral and
PT bacterial infections, and cancer, e.g. biliary tract cancer, breast
PT cancer, cervical cancer.
XX
XX Example; SEQ ID NO 11; 104pp; English.
XX
XX The invention relates to a class of CpG immunostimulatory
XX oligonucleotides containing a 5'TCG motif or a CG at or the 5' end that
XX are useful for stimulating an immune response. Oligonucleotides and
XX compositions of the invention are useful for treating allergy or asthma,
XX viral and bacterial infections and cancer e.g. biliary tract cancer,
XX breast cancer, cervical cancer, choriocarcinoma, colon cancer,
XX endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
XX liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
XX neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,
XX rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
XX and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,
XX Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
XX testicular cancer, as well as other carcinomas and sarcomas. The
XX invention is also useful in gene therapy. The present sequence is a CpG
XX immunostimulatory oligonucleotide.
XX
XX Sequence 17 BP; 0 A; 1 C; 1 G; 15 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2723
Db 17 CGAAAAA 1

RESULT 1552
ADP86146/C
ID ADP86146 standard; DNA; 17 BP.
XX
XX AC ADP86146;
XX
XX 09-SEP-2004 (first entry)
XX
XX CpG immunostimulatory oligonucleotide #17.
XX
XX CpG immunostimulatory oligonucleotide; immune response; allergy; asthma;
XX viral infection; bacterial infection; cancer; lymphoma;
XX intraepithelial neoplasm; melanoma; neuroblastoma; Hodgkin's lymphoma;
XX carcinoma; sarcoma; gene therapy; phosphorothioate; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
FH modified_base 1..17
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT misc_RNA 2
FT /*tag= b
FT /label= RNA
XX
XX WO2004053104-A2.
XX
XX 24-JUN-2004.
XX
XX 11-DEC-2003; 2003WO-US039775.
XX
XX 11-DEC-2002; 2002US-0432409P.
XX
XX 25-SEP-2003; 2003US-0506108P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Jurk M, Vollmer J, Uhlmann E;
XX
XX WPI; 2004-487902/46.
XX
XX New oligonucleotides, useful for treating allergy or asthma, viral and
PT

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PT bacterial infections, and cancer, e.g. biliary tract cancer, breast
PT cancer, cervical cancer.
XX
XX Example; SEQ ID NO 17; 104pp; English.
XX
XX The invention relates to a class of CpG immunostimulatory
XX oligonucleotides containing a 5'TCG motif or a CG at or the 5' end that
XX are useful for stimulating an immune response. Oligonucleotides and
XX compositions of the invention are useful for treating allergy or asthma,
XX viral and bacterial infections and cancer e.g. biliary tract cancer,
XX breast cancer, cervical cancer, choriocarcinoma, colon cancer,
XX endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
XX liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
XX neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer,
XX rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
XX and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,
XX Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
XX testicular cancer, as well as other carcinomas and sarcomas. The
XX invention is also useful in gene therapy. The present sequence is a CpG
XX immunostimulatory oligonucleotide.
XX
XX Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;
SQ
Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAA 2725
Db 17 AAAAAA 1

RESULT 1553
ADP86185/C
ID ADP86185 standard; DNA; 17 BP.
XX
XX AC ADP86185;
XX
XX 09-SEP-2004 (first entry)
XX
XX CpG immunostimulatory oligonucleotide #56 (DNA-RNA hybrid).
XX
XX CpG immunostimulatory oligonucleotide; immune response; allergy; asthma;
XX viral infection; bacterial infection; cancer; lymphoma;
XX intraepithelial neoplasm; melanoma; neuroblastoma; Hodgkin's lymphoma;
XX carcinoma; sarcoma; gene therapy; phosphorothioate; DNA-RNA hybrid; ss.
XX
XX Unidentified.
XX
XX Key Location/Qualifiers
FH modified_base 1..17
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT misc_RNA 2
FT /*tag= b
FT /label= RNA
XX
XX WO2004053104-A2.
XX
XX 24-JUN-2004.
XX
XX 11-DEC-2003; 2003WO-US039775.
XX
XX 11-DEC-2002; 2002US-0432409P.
XX
XX 25-SEP-2003; 2003US-0506108P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
XX (COLE-) COLEY PHARM GMBH.
XX
XX Krieg AM, Jurk M, Vollmer J, Uhlmann E;
XX
XX WPI; 2004-487902/46.
XX
XX

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XX	New oligonucleotides, useful for treating allergy or asthma, viral and bacterial infections, and cancer, e.g. biliary tract cancer, breast cancer, cervical cancer.
XX	Example; SEQ ID NO 56; 104pp; English.
XX	The invention relates to a class of CpG immunostimulatory oligonucleotides containing a 5' TCG motif or a CG at or the 5' end that are useful for stimulating an immune response. Oligonucleotides and compositions of the invention are useful for treating allergy or asthma, viral and bacterial infections and cancer e.g. biliary tract cancer, breast cancer, cervical cancer, choriocarcinoma, colon cancer, endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms, liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma, CC neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer, rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain CC and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer, CC Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer, CC testicular cancer, as well as other carcinomas and sarcomas. The invention is also useful in gene therapy. The present sequence is a CpG immunostimulatory oligonucleotide (DNA-RNA hbrd).
XX	Sequence 17 BP; 0 A; 0 C; 1 G; 15 T; 1 U; 0 Other;
XX	Query Match 0.6%; Score 15.4; DB 1; Length 17;
XX	Best Local Similarity 94.1%; Pred. No. 1.2e+03;
XX	Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0
Qy	2709 AAAAAAAAAAAAAAAA 2725
Db	 17 AAAAAAAAAAAAAAACAA 1
RESULT 1554	
ID ADP86184/c	
ID ADP86184 standard; DNA; 17 BP.	
AC ADP86184;	
XX	
DT 09-SEP-2004 (first entry)	
DE	CpG immunostimulatory oligonucleotide #55 (DNA-RNA hybrid).
XX	
KW CpG immunostimulatory oligonucleotide; immune response; allergy; asthma; viral infection; bacterial infection; cancer; lymphoma; intraepithelial neoplasm; melanoma; neuroblastoma; Hodgkin's lymphoma; carcinoma; sarcoma; gene therapy; phosphorothioate; DNA-RNA hybrid; ss.	
OS Unidentified.	
FH Key	Location/Qualifiers
FT modified_base 1..17	/tag= a
FT /mcd_base= OTHER	
FT /note= "Phosphorothioate backbone"	
FT misc_RNA 3	/tag= b
FT /label= RNA	
XX	
FN WO2004053104-A2.	
PD 24-JUN-2004.	
XX	
PF 11-DEC-2003; 2003WO-US039775.	
XX	
PR 11-DEC-2002; 2002US-0432409P.	
XX	
PR 25-SEP-2003; 2003US-0506108P.	
XX	
PA (COLE-) COLEY PHARM GROUP INC.	
PA (COLE-) COLEY PHARM GMBH.	
XX	
PI Krieg AM, Jurk M, Vollmer J, Uhlmann E;	

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XX WPI; 2004-487902/46.
XX
XX New oligonucleotides, useful for treating allergy or asthma, viral and
XX bacterial infections, and cancer, e.g. biliary tract cancer, breast
XX cancer, cervical cancer.
XX
XX Example; SEQ ID NO 55; 104pp; English.
XX
XX The invention relates to a class of CpG immunostimulatory
XX oligonucleotides containing a 5'TCG motif or a CG at or the 5' end that
XX are useful for stimulating an immune response. Oligonucleotides and
XX compositions of the invention are useful for treating allergy or asthma,
XX viral and bacterial infections and cancer e.g. biliary tract cancer,
XX breast cancer, cervical cancer, choriocarcinoma, colon cancer,
XX endometrial cancer, gastric cancer, lymphomas, intraepithelial neoplasms,
XX liver cancer, lung cancer (e.g. small cell and non-small cell), melanoma,
XX neuroblastomas, ovarian cancer, pancreatic cancer, prostate cancer, brain
XX rectal cancer, sarcomas, thyroid cancer, renal cancer, bone cancer, brain
XX and CNS cancer, connective tissue cancer, oesophageal cancer, eye cancer,
XX Hodgkin's lymphoma, larynx cancer, oral cavity cancer, skin cancer,
XX testicular cancer, as well as other carcinomas and sarcomas. The
XX invention is also useful in gene therapy. The present sequence is a CpG
XX immunostimulatory oligonucleotide (DNA-RNA hybrid).
XX
XX Sequence 17 BP; 0 A; 1 C; 0 G; 15 T; 1 U; 0 Other;
XX
XX Query Match 0.6%; Score 15.4; DB 1; Length 17;
XX Best Local Similarity 94.1%; Pred. No. 1.2e+03;
XX Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0
XX
Qy 2709 AAAAAAAAAAAAAAAAAA 2725
Db |||||
17 AAAAAAAAAAAAAAAAAAGA 1
XX
RESULT 1555
ADZ30299/C
ID ADZ30299 standard; RNA; 17 BP.
AC ADZ30299;
XX
XX 30-JUN-2005 (first entry)
XX
XX Human H-Ras substrate RNA sequence SEQ ID NO:1337.
XX
XX short interfering RNA; siRNA; RNA interference; gene silencing;
XX cytostatic; cancer; Ras gene; substrate; ss.
XX
XX Homo sapiens.
XX
XX US2005080031-A1.
XX
XX 14-APR-2005.
XX
XX 26-NOV-2003; 2003US-00724270.
XX
XX 18-MAY-2001; 2001US-0292217P.
XX 29-MAY-2001; 2001US-0294140P.
XX 06-JUN-2001; 2001US-0296249P.
XX 20-JUL-2001; 2001US-0306883P.
XX 13-AUG-2001; 2001US-0311865P.
XX 10-SEP-2001; 2001US-0318471P.
XX 20-FEB-2002; 2002US-0358560P.
XX 06-MAR-2002; 2002US-0362016P.
XX 11-MAR-2002; 2002US-0363134P.
XX 20-MAY-2002; 2002WO-US015876.
XX 29-MAY-2002; 2002US-00157580.
XX 06-JUN-2002; 2002WO-US016840.
XX 06-JUN-2002; 2002US-00163552.
XX 29-AUG-2002; 2002US-0386782P.
XX 05-SEP-2002; 2002US-0406784P.
XX 05-SEP-2002; 2002US-0408378P.
XX

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PR 09-SEP-2002; 2002US-0409293P.
PR 10-SEP-2002; 2002US-00238700.
PR 15-JAN-2003; 2003US-0440129P.
PR 20-FEB-2003; 2003WO-US005028.
PR 20-FEB-2003; 2003WO-US005346.
PR 16-APR-2003; 2003US-00417012.
PR 24-APR-2003; 2003US-00422704.
PR 30-APR-2003; 2003US-00427160.
PR 23-MAY-2003; 2003US-00444853.
PR 29-AUG-2003; 2003US-00652791.
PR 23-OCT-2003; 2003US-00693059.
XX
PA (SIRN-) SIRNA THERAPEUTICS INC.
XX
XX Mcswiggen J;
PI
XX
DR WPI; 2005-331166/34.
XX
XX Novel double-stranded short interfering RNA molecule having first
PT nucleotide sequence complementary to RNA encoding HER2 or its portion,
PT and second nucleotide sequence having complementarity to first sequence,
PT useful for treating cancer.
XX
XX Example 1; SEQ ID NO 1337; 143pp; English.
XX
XX The invention relates to a double-stranded short interfering RNA (siRNA)
CC molecule (I) comprising a first nucleotide sequence having 19-23
CC nucleotides complementary to an RNA sequence encoding HER2 or its
CC portion, and a second nucleotide sequence having 19-23 nucleotides
CC exhibiting complementarity to the first sequence, and including at least
CC one nucleotide that is not a 2'-OH containing ribonucleotide. Also
CC described is a method of producing a class of nucleic acid-based gene
CC modulating agents that exhibit a high degree of specificity for RNA of a
CC desired target. (I) is useful for modulating HER2 activity in a cell, and
CC for treating diseases or conditions related to levels of HER2 gene
CC expression. (I) is useful for treating cancer, such as pancreatic cancer,
CC bladder cancer, lung cancer, breast cancer or prostate cancer. The
CC present sequence represents a human H-Ras substrate RNA sequence for a
CC DNzyme (ribozyme), which is used in an example from the present
CC invention for the identification of potential target sites in human Ras
CC RNA.
XX
XX Sequence 17 BP; 2 A; 4 C; 8 G; 0 T; 3 U; 0 Other;
SQ
Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
'Qy 1737 ACTGAGGCGCTCCCTG 1753
Db ||| ||||| |||||
17 ACCAGAGGCGCTCCCTG 1
RESULT 1556
AED81301/c
ID AED81301 standard; DNA; 17 BP.
XX
XX AED81301;
AC
XX
XX 26-JAN-2006 (first entry)
DT
XX
DE IL-10 expression assay, test oligonucleotide SEQ ID No:59.
XX
XX pharmaceutical; therapeutic; immune stimulation; immune response;
KW allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
KW immunosuppressive; phosphorothioate; ss.
XX
XX Synthetic.
OS
XX
XX WC2005111057-A2.
PN
XX
XX 24-NOV-2005.
PD
XX

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PF 04-APR-2005; 2005WO-US011827.
XX
PR 02-APR-2004; 2004US-0558951P.
XX
XX (COLE-) COLEY PHARM GROUP INC.
PA (COLE-) COLEY PHARM GMBH.
FA
XX
XX Krieg AM, Vollmer J;
PI
XX
XX WPI; 2005-786756/80.
DR
XX
XX New oligonucleotides, useful for treating an allergy or asthma, or an
PT autoimmune disease, arthritis, systemic lupus erythematosus, multiple
PT sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
XX
XX Example; SEQ ID NO 59; 11pp; English.
XX
XX The invention relates to an oligonucleotide having the formula: (a) 5'
CC XYN1YN2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
CC denotes the 3' end of the oligonucleotide, where X is a T or modified T
CC nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
CC nucleotide, and N1 and N2 are polynucleotides that do not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
CC polynucleotide contains a number of nucleotides that is at most 45% of
CC the number of nucleotides in the oligonucleotide; and (b) 5' XYN1YN2 3'
CC where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3'
CC end of the oligonucleotide, where X is a T or modified T nucleotide, Y is
CC a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
CC polynucleotide of 5-10 nucleotides, where N1 does not include a CG
CC dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
CC a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
CC pharmaceutical composition comprising the oligonucleotide in combination
CC with a therapeutic agent selected from chemotherapeutic agents,
CC radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
CC (2) a method of specifically increasing interleukin (IL)-10 expression
CC relative to interferon (IFN)-alpha expression in a subject, comprising
CC administering an oligonucleotide or a pharmaceutical composition to the
CC subject in need of increased IL-10 expression relative to IFN-alpha
CC expression; (3) a method of inducing an antigen-specific regulatory T
CC cell response in a subject by administering an immunostimulatory nucleic
CC acid or composition to a subject exposed to an antigen; (4) a method of
CC inducing an antigen-specific regulatory B cell response in a subject by
CC administering an immunostimulatory nucleic acid or composition to a
CC subject exposed to an antigen; (5) a method of treating an allergy or
CC asthma by exposing a subject to an allergen, and administering an
CC immunostimulatory nucleic acid or composition to the subject, where the
CC amount sufficient to prevent or alleviate an allergic response in an
CC allergen in the subject; (6) a method of treating an autoimmune disease
CC in a subject by exposing a subject to a self antigen, and administering
CC an immunostimulatory nucleic acid or composition to the subject, where
CC the immunostimulatory nucleic acid or composition is administered in an
CC amount sufficient to prevent or treat an autoimmune disease in the
CC subject; and (7) a method of reducing an antigen-specific response to an
CC implant in a subject by exposing a subject to an implant antigen, and
CC administering an immunostimulatory nucleic acid or composition to the
CC subject, where the immunostimulatory nucleic acid or composition is
CC administered in an amount sufficient to prevent or reduce an antigen-
CC specific response to the implant in the subject. The oligonucleotide
CC includes at least 1 modified internucleotide linkage such as a
CC phosphorothioate linkage. The oligonucleotide, methods and compositions
CC of the invention are useful for treating allergies, asthma, autoimmune
CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
CC disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
CC hepatitis, immune-mediated diabetes mellitus, Grave's Disease,
CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune
CC disease of the adrenal gland, rheumatoid arthritis, scleroderma,

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CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
 CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
 CC an infection e.g. Lyme disease. This sequence represents an
 CC oligonucleotide used in experiments in the examples of the present
 CC invention.

SQ Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;

Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2709 AAAAAAAAAAAAAAAAAA 2725

Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1557

AED81286/c

ID AED81286 standard; DNA; 17 BP.

XX AED81286;

DT 26-JAN-2006 (first entry)

XX IL-10 expression assay, test oligonucleotide SEQ ID No:44.

XX pharmaceutical; therapeutic; immune stimulation; immune response;
 KW allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
 KW immunosuppressive; phosphorothioate; ss.

XX Synthetic.

XX WO2005111057-A2.

PN 24-NOV-2005.

XX 04-APR-2005; 2005WO-US011827.

PF 02-APR-2004; 2004US-0558951P.

PR (COLE-) COLEY PHARM GROUP INC.

PA (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Vollmer J;

XX WPI; 2005-786756/80.

XX New oligonucleotides, useful for treating an allergy or asthma, or an
 PT autoimmune disease, arthritis, systemic lupus erythematosus, multiple
 PT sclerosis, Crohn's disease, or Type 1 diabetes mellitus.

XX Example; SEQ ID NO 44; 111pp; English.

XX The invention relates to an oligonucleotide having the formula: (a) 5'
 CC XN1YN2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
 CC denotes the 3' end of the oligonucleotide, where X is a T or modified T
 CC nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
 CC nucleotide, and N1 and N2 are polynucleotides that do not include a CG
 CC dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
 CC polynucleotide consisting of the YZ dinucleotide and the N2
 CC polynucleotide contains a number of nucleotides that is at most 45% of
 CC the number of nucleotides in the oligonucleotide; and (b) 5' XN1YN2 3'
 CC where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3'
 CC end of the oligonucleotide, where X is a T or modified T nucleotide, Y is
 CC a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
 CC polynucleotide of 5-10 nucleotides, where N1 does not include a CG
 CC dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
 CC a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
 CC pharmaceutical composition comprising the oligonucleotide in combination
 CC with a therapeutic agent selected from chemotherapeutic agents,
 CC radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
 CC (2) a method of specifically increasing interleukin (IL)-10 expression

CC relative to interferon (IFN)-alpha expression in a subject, comprising
 CC administering an oligonucleotide or a pharmaceutical composition to the
 CC subject in need of increased IL-10 expression relative to IFN-alpha
 CC expression; (3) a method of inducing an antigen-specific regulatory T
 CC cell response in a subject by administering an immunostimulatory nucleic
 CC acid or composition to a subject exposed to an antigen; (4) a method of
 CC inducing an antigen-specific regulatory B cell response in a subject by
 CC administering an immunostimulatory nucleic acid or composition to a
 CC subject exposed to an antigen; (5) a method of treating an allergy or
 CC asthma by exposing a subject to an allergen, and administering an
 CC immunostimulatory nucleic acid or composition to the subject, where the
 CC immunostimulatory nucleic acid or composition is administered in an
 CC amount sufficient to prevent or alleviate an allergic response to an
 CC allergen in the subject; (6) a method of treating an autoimmune disease
 CC in a subject by exposing a subject to a self antigen, and administering
 CC an immunostimulatory nucleic acid or composition to the subject, where
 CC the immunostimulatory nucleic acid or composition is administered in an
 CC amount sufficient to prevent or treat an autoimmune disease in the
 CC subject; and (7) a method of reducing an antigen-specific response to an
 CC implant in a subject by exposing a subject to an implant antigen, and
 CC administering an immunostimulatory nucleic acid or composition to the
 CC subject, where the immunostimulatory nucleic acid or composition is
 CC administered in an amount sufficient to prevent or reduce an antigen-
 CC specific response to the implant in the subject. The oligonucleotide
 CC includes at least 1 modified internucleotide linkage such as a
 CC phosphorothioate linkage. The oligonucleotide, methods and compositions
 CC of the invention are useful for treating allergies, asthma, autoimmune
 CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
 CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
 CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
 CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
 CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
 CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
 CC Disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
 CC hepatitis, immune-mediated diabetes mellitus, Grave's Disease,
 CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune
 CC disease of the adrenal gland, rheumatoid arthritis, scleroderma,
 CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
 CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
 CC an infection e.g. Lyme disease. This sequence represents an
 CC oligonucleotide used in experiments in the examples of the present
 CC invention.

SQ Sequence 17 BP; 0 A; 1 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;

Best Local Similarity 94.1%; Pred. No. 1.2e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 2707 CTAATAAAAAAAAAAAAAA 2723

Db 17 CGAAAAAAAAAAAAAAAAA 1

RESULT 1558

AED81270/c

ID AED81270 standard; DNA; 17 BP.

XX AED81270;

XX 26-JAN-2006 (first entry)

XX IL-10 expression assay, test oligonucleotide SEQ ID No:28.

XX pharmaceutical; therapeutic; immune stimulation; immune response;
 KW allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
 KW immunosuppressive; phosphorothioate; ss.

XX Synthetic.

XX WO2005111057-A2.

XX 24-NOV-2005.

XX 04-APR-2005; 2005WO-US011827.
 XX 02-APR-2004; 2004US-0558951P.
 XX (COLE-) COLEY PHARM GROUP INC.
 XX (COLE-) COLEY PHARM GMBH.
 XX Krieg AM, Vollmer J;
 XX WPI; 2005-786756/80.
 XX New oligonucleotides, useful for treating an allergy or asthma, or an
 PT autoimmune disease, arthritis, systemic lupus erythematosus, multiple
 PT sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
 XX
 XX Example; SEQ ID NO 28; 111pp; English.
 XX
 CC The invention relates to an oligonucleotide having the formula: (a) 5'
 CC XN1Y2N2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
 CC denotes the 3' end of the oligonucleotide, where X is a T or modified T
 CC nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
 CC nucleotide, and N1 and N2 are polynucleotides that do not include a CG
 CC dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
 CC polynucleotide consisting of the YZ dinucleotide and the N2
 CC polynucleotide contains a number of nucleotides that is at most 45% of
 CC the number of nucleotides in the oligonucleotide; and (b) 5' XN1Y2N2 3'
 CC where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3'
 CC end of the oligonucleotide, where X is a T or modified T nucleotide, Y is a
 CC C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
 CC polynucleotide of 5-10 nucleotides, where N1 does not include a CG
 CC dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
 CC a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
 CC pharmaceutical composition comprising the oligonucleotide in combination
 CC with a therapeutic agent selected from chemotherapeutic agents,
 CC radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
 CC (2) a method of specifically increasing interleukin (IL)-10 expression
 CC relative to interferon (IFN)-alpha expression in a subject, comprising
 CC administering an oligonucleotide or a pharmaceutical composition to the
 CC subject in need of increased IL-10 expression relative to IFN-alpha
 CC expression; (3) a method of inducing an antigen-specific regulatory T
 CC cell response in a subject by administering an immunostimulatory nucleic
 CC acid or composition to a subject exposed to an antigen; (4) a method of
 CC inducing an antigen-specific regulatory B cell response in a subject by
 CC administering an immunostimulatory nucleic acid or composition to a
 CC subject exposed to an antigen; (5) a method of treating an allergy or
 CC asthma by exposing a subject to an allergen, and administering an
 CC immunostimulatory nucleic acid or composition to the subject, where the
 CC immunostimulatory nucleic acid or composition is administered in an
 CC amount sufficient to prevent or alleviate an allergic response to the
 CC allergen in the subject; (6) a method of treating an autoimmune disease
 CC in a subject by exposing a subject to a self antigen, and administering
 CC an immunostimulatory nucleic acid or composition to the subject, where
 CC the immunostimulatory nucleic acid or composition is administered in an
 CC amount sufficient to prevent or treat an autoimmune disease in the
 CC subject; and (7) a method of reducing an antigen-specific response to an
 CC implant in a subject by exposing a subject to an implant antigen, and
 CC administering an immunostimulatory nucleic acid or composition to the
 CC subject, where the immunostimulatory nucleic acid or composition is
 CC administered in an amount sufficient to prevent or reduce an antigen-
 CC specific response to the implant in the subject. The oligonucleotide
 CC includes at least 1 modified internucleotide linkage such as a
 CC phosphorothioate linkage. The oligonucleotide, methods and compositions
 CC of the invention are useful for treating allergies, asthma, autoimmune
 CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
 CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
 CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
 CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
 CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
 CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
 CC Disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
 CC hepatitis, immune-mediated diabetes mellitus, Grave's Disease,
 CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune

CC disease of the adrenal gland, rheumatoid arthritis, scleroderma,
 CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
 CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
 CC an infection e.g. Lyme disease. This sequence represents an
 CC oligonucleotide used in experiments in the examples of the present
 CC invention.
 XX
 XX Sequence 17 BP; 1 A; 0 C; 0 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred.No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2725
 Db 17 AAAAAAAAAAAAAAAAAA 1
 RESULT 1559
 AED81243/C
 ID AED81243 standard; DNA; 17 BP.
 XX
 AC AED81243;
 XX
 DT 26-JAN-2006 (first entry)
 XX
 DE IL-10 expression assay, test oligonucleotide SEQ ID No:1.
 XX
 KW pharmaceutical; therapeutic; immune stimulation; immune response;
 KW allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
 KW immunosuppressive; phosphorothioate; ss.
 XX
 OS Synthetic.
 XX
 XN WO2005111057-A2.
 XX
 XX 24-NOV-2005.
 XX
 XX 04-APR-2005; 2005WO-US011827.
 XX
 XX 02-APR-2004; 2004US-0558951P.
 XX
 XX (COLE-) COLEY PHARM GROUP INC.
 XX (COLE-) COLEY PHARM GMBH.
 XX Krieg AM, Vollmer J;
 XX WPI; 2005-786756/80.
 XX
 XX New oligonucleotides, useful for treating an allergy or asthma, or an
 PT autoimmune disease, arthritis, systemic lupus erythematosus, multiple
 PT sclerosis, Crohn's disease, or Type 1 diabetes mellitus.
 XX
 XX Example; SEQ ID NO 1; 111pp; English.
 XX
 CC The invention relates to an oligonucleotide having the formula: (a) 5'
 CC XN1Y2N2 3' where 5' denotes the 5' end of the oligonucleotide and 3'
 CC denotes the 3' end of the oligonucleotide, where X is a T or modified T
 CC nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G
 CC nucleotide, and N1 and N2 are polynucleotides that do not include a CG
 CC dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3'
 CC polynucleotide consisting of the YZ dinucleotide and the N2
 CC polynucleotide contains a number of nucleotides that is at most 45% of
 CC the number of nucleotides in the oligonucleotide; and (b) 5' XN1Y2N2 3'
 CC where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3'
 CC end of the oligonucleotide, where X is a T or modified T nucleotide, Y is a
 CC C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a
 CC polynucleotide of 5-10 nucleotides, where N1 does not include a CG
 CC dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is
 CC a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a
 CC pharmaceutical composition comprising the oligonucleotide in combination
 CC with a therapeutic agent selected from chemotherapeutic agents,
 CC radiotherapeutic agents, monoclonal antibodies, and anticancer agents;
 CC (2) a method of specifically increasing interleukin (IL)-10 expression
 CC relative to interferon (IFN)-alpha expression in a subject, comprising
 CC administering an oligonucleotide or a pharmaceutical composition to the
 CC subject in need of increased IL-10 expression relative to IFN-alpha
 CC expression; (3) a method of inducing an antigen-specific regulatory T
 CC cell response in a subject by administering an immunostimulatory nucleic
 CC acid or composition to a subject exposed to an antigen; (4) a method of
 CC inducing an antigen-specific regulatory B cell response in a subject by
 CC administering an immunostimulatory nucleic acid or composition to a
 CC subject exposed to an antigen; (5) a method of treating an allergy or
 CC asthma by exposing a subject to an allergen, and administering an
 CC immunostimulatory nucleic acid or composition to the subject, where the
 CC immunostimulatory nucleic acid or composition is administered in an
 CC amount sufficient to prevent or alleviate an allergic response to the
 CC allergen in the subject; (6) a method of treating an autoimmune disease
 CC in a subject by exposing a subject to a self antigen, and administering
 CC an immunostimulatory nucleic acid or composition to the subject, where
 CC the immunostimulatory nucleic acid or composition is administered in an
 CC amount sufficient to prevent or treat an autoimmune disease in the
 CC subject; and (7) a method of reducing an antigen-specific response to an
 CC implant in a subject by exposing a subject to an implant antigen, and
 CC administering an immunostimulatory nucleic acid or composition to the
 CC subject, where the immunostimulatory nucleic acid or composition is
 CC administered in an amount sufficient to prevent or reduce an antigen-
 CC specific response to the implant in the subject. The oligonucleotide
 CC includes at least 1 modified internucleotide linkage such as a
 CC phosphorothioate linkage. The oligonucleotide, methods and compositions
 CC of the invention are useful for treating allergies, asthma, autoimmune
 CC diseases, arthritis, systemic lupus erythematosus, multiple sclerosis,
 CC Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune
 CC neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune
 CC hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia,
 CC temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus
 CC vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's
 CC Disease, ulcerative colitis, primary biliary cirrhosis, autoimmune
 CC hepatitis, immune-mediated diabetes mellitus, Grave's Disease,
 CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune

(2) a method of specifically increasing interleukin (IL)-10 expression relative to interferon (IFN)-alpha expression in a subject, comprising administering an oligonucleotide or a pharmaceutical composition to the subject in need of increased IL-10 expression relative to IFN-alpha expression; (3) a method of inducing an antigen-specific regulatory T cell response in a subject by administering an immunostimulatory nucleic acid or composition to a subject exposed to an antigen; (4) a method of inducing an antigen-specific regulatory B cell response in a subject by administering an immunostimulatory nucleic acid or composition to a subject exposed to an antigen; (5) a method of treating an allergy or asthma by exposing a subject to an allergen, and administering an immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or alleviate an allergic response to the allergen in the subject; (6) a method of treating an autoimmune disease in a subject by exposing a subject to a self antigen, and administering the immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or treat an autoimmune disease in the subject; and (7) a method of reducing an antigen-specific response to an implant in a subject by exposing a subject to an implant antigen, and administering an immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or reduce an antigen-specific response to the implant in the subject. The oligonucleotide includes at least 1 modified internucleotide linkage such as a phosphorothioate linkage. The oligonucleotide, methods and compositions of the invention are useful for treating allergies, asthma, autoimmune diseases, arthritis, systemic lupus erythematosus, multiple sclerosis, Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia, temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's Disease, ulcerative colitis, primary biliary cirrhosis, autoimmune hepatitis, immune-mediated diabetes mellitus, Grave's Disease, Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune disease of the adrenal gland, rheumatoid arthritis, scleroderma, polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by an infection e.g. Lyme disease. This sequence represents an oligonucleotide used in experiments in the examples of the present invention.

XX Sequence 17 BP; 0 A; 1 C; 0 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAA 2725
Db 17 AAAAAAAAAAAAAAGA 1

RESULT 1560

ID AED81271/c
X AED81271 standard; DNA; 17 BP.

AC AED81271;

XX 26-JAN-2006 (first entry)

XX IL-10 expression assay, test oligonucleotide SEQ ID No:29.

XX pharmaceutical; therapeutic; immune stimulation; immune response;
KW allergy; asthma; autoimmune disease; antiasthmatic; antiallergic;
XX immunosuppressive; phosphorothioate; ss.

OS Synthetic.

PN WO2005111057-A2.

PD 24-NOV-2005.

XX 04-APR-2005; 2005WO-US011827.

XX 02-APR-2004; 2004US-0558951P.

XX (COLE-) COLEY PHARM GROUP INC.

PA (COLE-) COLEY PHARM GMBH.

XX Krieg AM, Vollmer J;

XX WPI; 2005-786756/80.

XX New oligonucleotides, useful for treating an allergy or asthma, or an autoimmune disease, arthritis, systemic lupus erythematosus, multiple sclerosis, Crohn's disease, or Type 1 diabetes mellitus.

PS Example; SEQ ID NO 29; 111pp; English.

CC The invention relates to an oligonucleotide having the formula: (a) 5' XN1YN2 3' where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3' end of the oligonucleotide, where X is a T or modified T nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G nucleotide, and N1 and N2 are polynucleotides that do not include a CG dinucleotide, where N1 does not include 5' Z nucleotide, and where a 3' polynucleotide consisting of the YZ dinucleotide and the N2 polynucleotide contains a number of nucleotides that is at most 45% of the number of nucleotides in the oligonucleotide; and (b) 5' XN1YN2 3' where 5' denotes the 5' end of the oligonucleotide and 3' denotes the 3' end of the oligonucleotide, where X is a T or modified T nucleotide, Y is a C or modified C nucleotide, Z is a G or modified G nucleotide, N1 is a polynucleotide of 5-10 nucleotides, where N1 does not include a CG dinucleotide, where N1 does not include 5' Z nucleotide, and where N2 is a polynucleotide of 5 to 30 nucleotides. Also described are: (1) a pharmaceutical composition comprising the oligonucleotide in combination with a therapeutic agent selected from chemotherapeutic agents, radiotherapeutic agents, monoclonal antibodies, and anticancer agents; (2) a method of specifically increasing interleukin (IL)-10 expression relative to interferon (IFN)-alpha expression in a subject, comprising administering an oligonucleotide or a pharmaceutical composition to the subject in need of increased IL-10 expression relative to IFN-alpha expression; (3) a method of inducing an antigen-specific regulatory T cell response in a subject by administering an immunostimulatory nucleic acid or composition to a subject exposed to an antigen; (4) a method of inducing an antigen-specific regulatory B cell response in a subject by administering an immunostimulatory nucleic acid or composition to a subject exposed to an antigen; (5) a method of treating an allergy or asthma by exposing a subject to an allergen, and administering an immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or alleviate an allergic response to the allergen in the subject; (6) a method of treating an autoimmune disease in a subject by exposing a subject to a self antigen, and administering an immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or treat an autoimmune disease in the subject; and (7) a method of reducing an antigen-specific response to an implant in a subject by exposing a subject to an implant antigen, and administering an immunostimulatory nucleic acid or composition to the subject, where the immunostimulatory nucleic acid or composition is administered in an amount sufficient to prevent or reduce an antigen-specific response to the implant in the subject. The oligonucleotide includes at least 1 modified internucleotide linkage such as a phosphorothioate linkage. The oligonucleotide, methods and compositions of the invention are useful for treating allergies, asthma, autoimmune diseases, arthritis, systemic lupus erythematosus, multiple sclerosis, Crohn's disease, Type 1 diabetes mellitus, myasthenia gravis, autoimmune neuropathies such as Guillain-Barre, autoimmune uveitis, autoimmune hemolytic anemia, pernicious anemia, autoimmune thrombocytopenia, temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's Disease, ulcerative colitis, primary biliary cirrhosis, autoimmune hepatitis, immune-mediated diabetes mellitus, Grave's Disease, hepatitis, immune-mediated diabetes mellitus, autoimmune thrombocytopenia, temporal arteritis, anti-phospholipid syndrome, psoriasis, pemphigus vulgaris, vasculitis such as Wegener's granulomatosis, vitiligo, Crohn's Disease, ulcerative colitis, primary biliary cirrhosis, autoimmune hepatitis, immune-mediated diabetes mellitus, Grave's Disease.

CC Hashimoto's thyroiditis, autoimmune oophoritis and orchitis, autoimmune
 CC disease of the adrenal gland, rheumatoid arthritis, scleroderma,
 CC polymyositis, dermatomyositis, spondyloarthropathies such as ankylosing
 CC spondylitis, and Sjogren's syndrome. The autoimmune disease is caused by
 CC an infection e.g. Lyme disease. This sequence represents an
 CC oligonucleotide used in experiments in the examples of the present
 CC invention.

SQ Sequence 17 BP; 0 A; 0 C; 1 G; 16 T; 0 U; 0 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAAAAAAAAAAAAAA 2725
 Db 17 AAAAAAAAAAAAAAAAAA 1

RESULT 1561
 AEF63888/c
 ID AEF63888 standard; DNA; 17 BP.
 XX AC AEF63888;
 XX DT 06-APR-2006 (first entry)
 XX DE Carotenoid cleavage dioxygenase associated primer PolyT.
 XX KW transformation; genetically engineered microorganism; PCR; primer; ss.
 XX OS Synthetic.
 XX PN WO2006010930-A2.
 XX PD 02-FEB-2006.
 XX PF 27-JUL-2005; 2005WO-GB002955.
 XX PR 28-JUL-2004; 2004GB-00016832.
 XX PR 04-AUG-2004; 2004GB-00017372.
 XX PA (DANI-) DANISCO AS.
 XX PI Beekwilder MJ, Sibbesen O, Mikkelsen JD, Van Der Meer IM, Hall RD;
 XX Qvist I;
 XX WPI; 2006-125795/13.

XX Host cell for producing carotenoid cleavage compound for flavoring or
 XX perfume applications comprises cell transformed or transfected with
 XX nucleic acid encoding plant-derived carotenoid cleavage dioxygenase.
 XX Example; Page 69; 85pp; English.

XX The invention describes a host cell transformed or transfected with a
 XX nucleic acid encoding a plant-derived carotenoid cleavage dioxygenase
 XX (CCD) enzyme. Also described are: (1) a plasmid or vector system
 XX comprising a nucleotide including one of 1617, 1696, 1653, or 1557-amino
 XX acid sequence (SEQ ID No. 1, 3, 5, or 9) given in the specification or a
 XX sequence that is 75% homologous; (2) producing (M1) a carotenoid cleavage
 XX compound comprising treating a carotenoid with a plant-derived CCD; (3)
 XX an enzyme comprising the amino acid sequence corresponding to Rubus
 XX idaeus CCD or its functional equivalent or effective fragment; (4) an
 XX isolated nucleic acid molecule coding for the enzyme, comprising a
 XX nucleotide sequence that is the same as, or complementary to a 2429 base
 XX pair sequence (SEQ ID NO.3) or has at least 75% homology with SEQ ID NO.3
 XX ; and (5) a CrL-e enzyme comprising 527-amino acid sequence (SEQ ID No.
 XX 10) or its effective fragment. The host cell is used for producing a
 XX carotenoid cleavage compound, e.g. alpha or beta ionone, pseudo ionone,
 XX safranal, theaspirone, damascone or damascenone, and for producing GDDP,
 XX beta -carotene, lycopene, or delta carotene for use in flavoring or
 XX perfume applications including e.g. soft drinks, fruit juice or beverage

CC comprising whey protein, health teas, cocoa drinks, milk drinks and
 CC lactic acid bacterial drinks, yogurt, drinking yogurt and wine, bakery
 CC product including bread, Danish pastry, biscuits or cookies,
 CC confectionery product, pharmaceutical composition for therapeutic or
 CC diagnostic purposes. The invention provides reliable and efficient
 CC production of aroma compounds or precursors, particularly carotenoid
 CC cleavage compounds that does not rely solely on chemical synthesis
 CC techniques. This sequence represents a primer associated with the
 CC isolation and cloning of DNA encoding a carotenoid cleavage dioxygenase
 CC (CCD).

XX SQ Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 1.2e+03;
 Matches 15; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAA 2723
 Db 17 BBAATAAAAAAAAAAAAA 1

RESULT 1562
 AEF88073/c
 ID AEF88073 standard; DNA; 17 BP.
 XX AC AEF88073;
 XX DT 20-APR-2006 (first entry)
 XX DE Poly T primer, to synthesize red raspberry CHS cDNA and rhubarb BAS cDNA.
 XX KW Flavor enhancer; food; cosmetics; weight loss;
 XX KW naringenin-chalcone synthase; chalcone synthase; benzalacetone synthase;
 XX KW primer; ss.
 XX OS Rubus idaeus; cultivar Tulameen.
 XX OS Rheum palmatum.
 XX PN GB2416769-A.
 XX PD 08-FEB-2006.
 XX PF 28-JUL-2004; 2004GB-00016830.
 XX PR 28-JUL-2004; 2004GB-00016830.
 XX PA (DANI-) DANISCO AS.
 XX PI Beekwilder MJ, Sibbesen O, Mikkelsen JD, Van Der Meer IM, Hall RD;
 XX Qvist I;
 XX WPI; 2006-158186/17.

XX Host cell comprising a benzalacetone synthase (BAS) polypeptide sequence
 XX or a 4-coumarate:CoA ligase (4CL) sequence, useful in a bacterial method
 XX of producing benzalacetone and/or raspberry ketone is new.

XX Example; Page 35; 83pp; English.

XX The present invention relates to a host cell comprising a benzalacetone
 XX synthase (BAS) polypeptide and 4-coumarate:CoA ligase (4CL); also referred
 XX as 4-coumaroyl-CoA synthetase; p-coumaroyl CoA ligase; p-coumaryl
 XX coenzyme A synthetase; p-coumaryl CoA synthetase; p-coumaryl-CoA ligase;
 XX feruloyl CoA ligase; hydroxycinnamoyl CoA synthetase; 4-
 XX coumarate:coenzyme A ligase; caffeoyl coenzyme A synthetase; p-
 XX hydroxycinnamoyl coenzyme A synthetase; feruloyl Coenzyme A synthetase;
 XX sinapoyl coenzyme A synthetase; 4-coumaryl CoA synthetase;
 XX hydroxycinnamate:CoA ligase; p-coumaryl-CoA ligase and p-hydroxycinnamic
 XX acid:CoA ligase; EC 6.2.1.12) sequence in which one or both of the BAS
 XX polypeptide and the 4CL sequence is heterologous to the host cell. BAS is
 XX a member of polyketide synthase family. The host cell also comprises
 XX benzalacetone reductase (BAR) activity. The host cell is useful in the

CC production of benzalacetones and/or raspberry ketones from p-coumaric
CC acid. Raspberry ketone is a flavor component used in the food industry.
CC Benzalacetones and raspberry ketones are useful in aroma formulations in
CC food market, cosmetics, household products such as air fresheners and in
CC weight loss products. The present sequence is a PCR primer used in the
CC synthesis of red raspberry chalcone synthase (CHS) cDNA and benzalacetone
CC synthase (BAS) cDNA, which is used in the production of raspberry ketone.
XX Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;
SQ

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 1.2e+03;
Matches 15; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAA 2723
DB 17 BBAAAAAATAAAAAA 1

RESULT 1563
AEF87959/c
ID AEF87959 standard; DNA; 17 BP.
XX
AC AEF87959;
XX
DT 20-APR-2006 (first entry)
XX
DE Poly T primer used to synthesize red raspberry chalcone synthase (CHS).
XX
KW Flavor enhancer; food; cosmetics; weight loss;
KW naringenin-chalcone synthase; chalcone synthase; flavanone synthase;
KW 6'-deoxychalcone synthase; chalcone synthetase; DOCS; primer; ss.
XX
OS Rubus idaeus; cultivar Tulameen.
XX
PN GB2416770-A.
XX
PD 08-FEB-2006.
XX
PF 28-JUL-2004; 2004GB-00016845.
XX
PR 28-JUL-2004; 2004GB-00016845.
XX
PA (DANT-) DANISCO AS.
XX
XX Beekwilder MJ, Sibbesen O, Mikkelsen JD, Van Der Meer IM, Hall RD;
PI Qvist I;
XX WPI; 2006-139883/15.
XX
XX Host cell used in producing benzalacetone or raspberry ketone comprises
PT chalcone synthase polypeptide sequence and 4-coumarate:CoA ligase
PT sequence.
XX
XX Example; Page 43; 111pp; English.

CC The present invention relates to a host cell comprising a chalcone
CC synthase (CHS; also referred as naringenin-chalcone synthase, flavanone
CC synthase; 6'-deoxychalcone synthase; chalcone synthetase and DOCS; EC
CC 2.3.1.74) polypeptide sequence and 4-coumarate:CoA ligase (4CL; also
CC referred as 4-coumaroyl-CoA synthetase; p-coumaroyl CoA ligase; p-
CC coumaryl coenzyme A synthetase; p-coumaryl CoA synthetase; p-coumaryl-CoA
CC ligase; feruloyl CoA ligase; hydroxycinnamoyl CoA synthetase; 4-
CC coumarate:coenzyme A ligase; caffeoyl coenzyme A synthetase; p-
CC hydroxycinnamoyl coenzyme A synthetase; feruloyl coenzyme A synthetase;
CC sinapoyl coenzyme A synthetase; 4-coumaryl-CoA synthetase;
CC hydroxycinnamate:CoA ligase; p-coumaryl CoA ligase and p-hydroxycinnamic
CC acid:CoA ligase; EC 6.2.1.12) sequence in which one or both are
CC heterologous to the host cell. The host cell also comprises benzalacetone
CC reductase (BAR) activity. The host cell is useful in production of
CC benzalacetone or raspberry ketone from p-coumaric acid. Raspberry ketones
CC is a flavour component used in the food industry. Benzalacetones and
CC raspberry ketones are useful in aroma formulations in food market,

CC cosmetics, household products such as air fresheners and in weight loss
CC products. Chalcone synthase has benzalacetone synthase (BAS) activity.
CC The present sequence is a primer used in the synthesis of red raspberry
CC chalcone synthase (CHS) cDNA.
XX Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;
SQ

Query Match 0.6%; Score 15.4; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 1.2e+03;
Matches 15; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 2707 CTAAAAAATAAAAAA 2723
DB 17 BBAAAAAATAAAAAA 1

RESULT 1564
AAQ20109/c
ID AAQ20109 standard; DNA; 18 BP.
XX
AC AAQ20109;
XX
DT 01-APR-1992 (first entry)
XX
DE Cross-linking oligomer 943 to target human TNF Receptor mRNA.
XX
KW deoxyribonucleic acid; major groove; ethanecarboxylic acid;
KW tumour necrosis factor; receptor; messenger RNA; aziridinylcytosine;
KW cross-linking group; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 5
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "N-methyl-8-oxo-2'-deoxyadenine"
FT FT 18
FT FT /*tag= b
FT FT /mod_base= OTHER
FT FT /note= "N4N4-ethanocytosine"
XX
XX WO9118997-A.
XX
XX 12-DEC-1991.
XX
XX 25-MAY-1990; 90US-00529346.
XX
XX 25-MAY-1990; 90US-00529346.
XX 14-JAN-1991; 91US-00640654.
XX (GILE-) GILEAD SCIE INC.
XX
XX Matteucci MD, Krawczyk S;
XX WPI; 1992-007480/01.
XX
XX New sequence-specific non-photo-activated crosslinking agents - bind to
PT the major groove of duplex DNA and are esp. useful for treating latent
PT infections e.g. HIV.
XX
XX Example 4; Page 27; 42pp; English.

CC The oligomer was designed to target human TNF receptor mRNA beginning at
CC nucleotide 2354 and to covalently cross-link to the target via the N4N4-
CC ethanocytosine group. See also AAQ20108
XX Sequence 18 BP; 1 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
SQ

Query Match 0.6%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

KW Human tumour necrosis factor receptor mRNA; AIDS; modified; HIV; RSV;
 KW HPV; malignancy; hepatitis; inflammation; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT modified_base 5
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "N6 methyl-8-oxo-2' deoxyadenine"
 FT modified_base 18
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= N4 N4 ethanocytosine"
 XX
 XX W09209705-A1.
 XX
 XX 11-JUN-1992.
 XX
 XX 25-NOV-1991; 91WO-US008811.
 XX
 XX 23-NOV-1990; 90US-00617907.
 PR 18-JAN-1991; 91US-00643382.
 PR 08-APR-1991; 91US-00683420.
 PR 17-APR-1991; 91US-00686544.
 PR 17-APR-1991; 91US-00686546.
 PR 17-APR-1991; 91US-00686547.
 PR 27-SEP-1991; 91US-00766733.
 XX
 XX (GILE-) GILEAD SCI INC.
 XX
 XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
 XX
 XX WPI; 1992-217083/26.
 XX
 XX New oligomers contg. modified bases - which form a triplex with G-C
 PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
 PT herpes malignancy and inflammation.
 XX
 XX Claim 12; Page 72; 77pp; English.
 XX
 XX The synthetic oligomer is capable of forming a triplex at physiological
 CC pH with a purine rich target sequence by coupling into the major groove
 CC of the duplex. The specific target sequence of this oligomer is the human
 CC tumour necrosis factor receptor mRNA beginning at nucleotide 2354 contg.
 CC a purine rich sequence concd. on one strand of the duplex. The oligomer,
 CC and others like it are useful in diagnosis and therapy of diseases.
 CC characterised by specific DNA duplex targets, e.g. HPV, HER, HIV.
 CC hepatitis B, herpes, malignant tumours and inflammation. The triple
 CC helices form under mild conditions thus assays may be carried out without
 CC subjecting the test specimen to harsh conditions. See also AAQ25452-25501
 CC and AAQ30226-447. (Updated on 25-MAR-2003 to correct PN field.) (Updated
 CC on 25-MAR-2003 to correct PD field.)
 XX
 XX Sequence 18 BP; 1 A; 1 C; 0 G; 16 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. NO. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2725
 Db 17 AAAAAAAAAAAAAAAAAA 1
 RESULT 1568
 AAQ30447/C
 ID AAQ30447 standard; DNA; 18 BP.
 XX
 XX AAQ30447;
 AC
 XX 25-MAR-2003 (revised)
 DT 07-DEC-1992 (first entry)

XX Oligomer TNFR942 for forming triplex with HUMNFR target duplex.
 DE
 XX
 XX Human tumour necrosis factor receptor mRNA; AIDS; modified; HIV; RSV;
 KW HPV; malignancy; hepatitis; inflammation; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FT modified_base 5
 FT /*tag= a
 FT /mod_base= m5c
 FT modified_base 18
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= N4 N4 ethanocytosine"
 XX
 XX W09209705-A1.
 XX
 XX 11-JUN-1992.
 XX
 XX 25-NOV-1991; 91WO-US008811.
 XX
 XX 23-NOV-1990; 90US-00617907.
 PR 18-JAN-1991; 91US-00643382.
 PR 08-APR-1991; 91US-00683420.
 PR 17-APR-1991; 91US-00686544.
 PR 17-APR-1991; 91US-00686546.
 PR 17-APR-1991; 91US-00686547.
 PR 27-SEP-1991; 91US-00766733.
 XX
 XX (GILE-) GILEAD SCI INC.
 XX
 XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
 XX
 XX WPI; 1992-217083/26.
 XX
 XX New oligomers contg. modified bases - which form a triplex with G-C
 PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
 PT herpes malignancy and inflammation.
 XX
 XX Claim 12; Page 72; 77pp; English.
 XX
 XX The synthetic oligomer is capable of forming a triplex at physiological
 CC pH with a purine rich target sequence by coupling into the major groove
 CC of the duplex. The specific target sequence of this oligomer is the human
 CC tumour necrosis factor receptor mRNA beginning at nucleotide 2354 contg.
 CC a purine rich sequence concd. on one strand of the duplex. The oligomer,
 CC and others like it are useful in diagnosis and therapy of diseases.
 CC characterised by specific DNA duplex targets, e.g. HPV, HER, HIV.
 CC hepatitis B, herpes, malignant tumours and inflammation. The triple
 CC helices form under mild conditions thus assays may be carried out without
 CC subjecting the test specimen to harsh conditions. See also AAQ25452-25501
 CC and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.) (Updated
 CC on 25-MAR-2003 to correct PD field.)
 XX
 XX Sequence 18 BP; 0 A; 2 C; 0 G; 16 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. NO. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2709 AAAAAAAAAAAAAAAAAA 2725
 Db 17 AAAAAAAAAAAAAAAAAA 1
 RESULT 1569
 AAV54168/C
 ID AAV54168 standard; cDNA; 18 BP.
 XX
 XX AAV54168;
 AC
 XX

CC immunohistological staining, as apoptosis inhibitors. It can also be used
 CC for treatment of apoptosis-related diseases

SQ Sequence 18 BP; 0 A; 0 C; 3 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.2e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAATAAAAAAAAAAAAAA 2723

Db 18 CCAAAAAAAAAAAAAAAAAA 2

RESULT 1575

AAZ90648/c

ID AAZ90648 standard; DNA; 18 BP.

AC AAZ90648;

DT 13-JUN-2000 (first entry)

DE Human adipose tissue gene amplifying primer #9.

KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;

KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.

OS Homo sapiens.

PN JP2000037190-A.

PD 08-FEB-2000.

PF 23-JUL-1998; 98JP-00225228.

PR 23-JUL-1998; 98JP-00225228.

PA (NISR) JAPAN TOBACCO INC.

DR WPI; 2000-306578/27.

A physiologically active protein specifically derived from mammal tissue.

Example 2; Page 18; 50pp; Japanese.

CC The invention relates to identification of genes and proteins of adipose
 CC tissue relating to obesity, particularly complications of visceral
 CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
 CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
 CC proteins (AAZ9598-Y67600) are used in the genetic diagnosis, prevention
 CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
 CC represent PCR primers amplifying the human adipose tissue genes

SQ Sequence 18 BP; 1 A; 1 C; 1 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.2e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2708 TAAAAAAAAAAAAAAAAA 2724

Db 18 TGAATAAAAAAAAAAAAAA 2

RESULT 1576

AAZ90644/c

ID AAZ90644 standard; DNA; 18 BP.

AC AAZ90644;

DT 13-JUN-2000 (first entry)

DE Human adipose tissue gene amplifying primer #5.

XX

KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
 KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.

OS Homo sapiens.

PN JP2000037190-A.

PD 08-FEB-2000.

PF 23-JUL-1998; 98JP-00225228.

PR 23-JUL-1998; 98JP-00225228.

PA (NISR) JAPAN TOBACCO INC.

DR WPI; 2000-306578/27.

A physiologically active protein specifically derived from mammal tissue.

Example 2; Page 18; 50pp; Japanese.

CC The invention relates to identification of genes and proteins of adipose
 CC tissue relating to obesity, particularly complications of visceral
 CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
 CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
 CC proteins (AAZ9598-Y67600) are used in the genetic diagnosis, prevention
 CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
 CC represent PCR primers amplifying the human adipose tissue genes

SQ Sequence 18 BP; 0 A; 0 C; 2 G; 16 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.2e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2706 ACTAAAAAATAAAAAA 2722

Db 18 ACATAAAAAAATAAAAAA 2

RESULT 1577

AAZ90642/c

ID AAZ90642 standard; DNA; 18 BP.

AC AAZ90642;

DT 13-JUN-2000 (first entry)

DE Human adipose tissue gene amplifying primer #3.

KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
 KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.

OS Homo sapiens.

PN JP2000037190-A.

PD 08-FEB-2000.

PF 23-JUL-1998; 98JP-00225228.

PR 23-JUL-1998; 98JP-00225228.

PA (NISR) JAPAN TOBACCO INC.

DR WPI; 2000-306578/27.

A physiologically active protein specifically derived from mammal tissue.

Example 2; Page 18; 50pp; Japanese.

CC The invention relates to identification of genes and proteins of adipose

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CC tissue relating to obesity, particularly complications of visceral
CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
CC proteins (AAV67598-Y67600) are used in the genetic diagnosis, prevention
CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
CC represent PCR primers amplifying the human adipose tissue genes
XX
SQ Sequence 18 BP; 0 A; 1 C; 2 G; 15 T; 0 U; 0 Other;

  Query Match          0.6%; Score 15.4; DB 1; Length 18;
  Best Local Similarity 94.1%; Pred. No. 1.2e+03;
  Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2723
Db 18 CGAAAAA 2

RESULT 1578
AAZ90641/c
ID AAZ90641 standard; DNA; 18 BP.
XX
AC AAZ90641;
XX
DT 13-JUN-2000 (first entry)
XX
DE Human adipose tissue gene amplifying primer #2.
XX
KW Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN JP2000037190-A.
XX
PD 08-FEB-2000.
XX
PF 23-JUL-1998; 98JP-00225228.
XX
PR 23-JUL-1998; 98JP-00225228.
XX
PA (NIBS ) JAPAN TOBACCO INC.
XX
WPI; 2000-306578/27.
XX
A physiologically active protein specifically derived from mammal tissue.
XX
Example 2; Page 18; 50pp; Japanese.
XX
The invention relates to identification of genes and proteins of adipose
XX tissue relating to obesity, particularly complications of visceral
XX obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
XX hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
XX proteins (AAV67598-Y67600) are used in the genetic diagnosis, prevention
XX and treatment of adipose tissue related diseases. Sequences AAZ90640-51
XX represent PCR primers amplifying the human adipose tissue genes
XX
SQ Sequence 18 BP; 0 A; 1 C; 3 G; 15 T; 0 U; 0 Other;

  Query Match          0.6%; Score 15.4; DB 1; Length 18;
  Best Local Similarity 94.1%; Pred. No. 1.2e+03;
  Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2707 CTAAGAAAAA 2723
Db 18 CGAAAAA 2

RESULT 1579
AAZ90645/c
ID AAZ90645 standard; DNA; 18 BP.
XX
AC AAZ90645;

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XX 13-JUN-2000 (first entry)
DT
XX Human adipose tissue gene amplifying primer #6.
DE
XX Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
XX arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.
KW
XX Homo sapiens.
OS
XX JP2000037190-A.
PN
XX 08-FEB-2000.
PD
XX 23-JUL-1998; 98JP-00225228.
PF
XX 23-JUL-1998; 98JP-00225228.
PR
XX (NIBS ) JAPAN TOBACCO INC.
PA
XX WPI; 2000-306578/27.
DR
XX A physiologically active protein specifically derived from mammal tissue.
PT
XX Example 2; Page 18; 50pp; Japanese.
PS
XX The invention relates to identification of genes and proteins of adipose
CC tissue relating to obesity, particularly complications of visceral
CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
CC proteins (AAV67598-Y67600) are used in the genetic diagnosis, prevention
CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51
CC represent PCR primers amplifying the human adipose tissue genes
CC
XX
SQ Sequence 18 BP; 0 A; 1 C; 1 G; 16 T; 0 U; 0 Other;

  Query Match          0.6%; Score 15.4; DB 1; Length 18;
  Best Local Similarity 94.1%; Pred. No. 1.2e+03;
  Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2709 AAAAAA 2725
Db 18 AGAAAAA 2

RESULT 1580
AAZ90647/c
ID AAZ90647 standard; DNA; 18 BP.
XX
AC AAZ90647;
XX
DT 13-JUN-2000 (first entry)
DE
XX Human adipose tissue gene amplifying primer #8.
DE
XX Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
KW arteriosclerosis; hyperuricemia; sleep apnea syndrome; PCR primer; ss.
KW
XX Homo sapiens.
OS
XX JP2000037190-A.
PN
XX 08-FEB-2000.
PD
XX 23-JUL-1998; 98JP-00225228.
PF
XX 23-JUL-1998; 98JP-00225228.
PR
XX (NIBS ) JAPAN TOBACCO INC.
PA
XX WPI; 2000-306578/27.
DR
XX A physiologically active protein specifically derived from mammal tissue.
PT

```

XX Example 2; Page 18; 50pp; Japanese.

XX The invention relates to identification of genes and proteins of adipose

CC tissue relating to obesity, particularly complications of visceral

CC obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,

CC hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the

CC proteins (AAV67598-767600) are used in the genetic diagnosis, prevention

CC and treatment of adipose tissue related diseases. Sequences AAZ90640-51

CC represent PCR primers amplifying the human adipose tissue genes

XX

SQ Sequence 18 BP; 1 A; 0 C; 2 G; 15 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.2e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2708 TAAAAAATAAAAAAAAAA 2724

Db 18 TCAAAAAAAAAAAAAAAAAA 2

RESULT 1581

AAZ70554/C

ID AAZ70554 standard; DNA; 18 BP.

XX AAZ70554;

XX 10-SEP-2001 (first entry)

XX Human biallelic marker upstream amplification primer SEQ ID NO:4910.

XX Human genome; biallelic marker; high density disequilibrium map;

KW genomic map; haplotype; phenotype; polymorphic base; genotyping;

KW haplotyping; hybridisation; identification; characterisation;

KW amplification; single nucleotide polymorphism; SNP; PCR primer;

KW diagnosis; ss.

XX

OS Homo sapiens.

XX WO9954500-A2.

XX 28-OCT-1999.

XX 21-APR-1999; 99WO-IB000822.

XX 21-APR-1998; 98US-0082614P.

PR 23-NOV-1998; 98US-0109732P.

XX (GEST) GENSET.

XX

PI Cohen D, Blumenfeld M, Chumakov I;

XX WPI; 2000-013267/01.

XX

XX Novel biallelic markers used to construct a high density disequilibrium

PT map of the human genome.

XX

PS Claim 8; Page 1278; 2745pp; English.

XX

CC AAZ65654 to AAZ69578 represent human biallelic markers from the present

CC invention, which contain a polymorphic base at position 24 of their

CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification

CC primers for the biallelic markers. The biallelic markers of the invention

CC have a variety of uses: they can be used for high density mapping of the

CC human genome, and in complex association studies and haplotyping studies

CC which are useful in determining the genetic basis for disease states.

CC Compositions and methods of the invention can also be useful for the

CC identification of the targets for the development of pharmaceutical

CC agents and diagnostic methods, as well as the characterisation of the

CC differential efficacious responses to and side effects from

CC pharmaceutical agents acting on a disease as well as other treatment.

CC N.B. The SEQ ID Nos 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and

CC 3367, are not actually given a sequence in the Sequence Listing from the

CC present invention

XX

SQ Sequence 18 BP; 0 A; 8 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.2e+03;

Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 701 GCAGAGGAAGAACAAAGA 717

Db 18 GGAGAGGAGAGACAGA 2

RESULT 1582

AAH37914/C

ID AAH37914 standard; DNA; 18 BP.

XX AAH37914;

XX 14-AUG-2001 (first entry)

XX SNP specific lower PCR primer SEQ ID 710.

XX Single nucleotide polymorphism; SNP; single nucleotide primer extension;

KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;

KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;

KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;

KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;

KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.

XX

OS Homo sapiens.

XX WO200129262-A2.

XX 26-APR-2001.

XX 13-OCT-2000; 2000WO-US028436.

XX 15-OCT-1999; 99US-0160096P.

XX (ORCH-) ORCHID BIOSCIENCES INC.

XX Picoult-Newburg L, Pohl M;

XX WPI; 2001-250930/30.

XX

XX New genotyping oligonucleotide, useful for detecting the presence,

PT absence or identity of single polynucleotide polymorphism in a nucleic

PT acid sample.

XX

XX Claim 1; Page 53; 83pp; English.

XX

CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide

CC primer extension (SNPE) primers, and the sequences of regions flanking

CC sites of single nucleotide polymorphisms SNPs. The present invention

CC includes kits for determining the presence or absence of a SNP, using the

CC oligonucleotides of the invention. The PCR primers are used to amplify a

CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.

CC The oligonucleotides are useful for genotyping a nucleic acid sample by

CC performing a single-nucleotide primer extension reaction. The

CC oligonucleotides are useful for determining the presence, absence or

CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to

CC assess by association analysis the genotype of an individual or group of

CC individuals, having a pathological phenotypic trait suspected of being

CC caused by one or more SNPs. Phenotypic traits include diseases e.g.

CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular

CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,

CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic

CC traits also include symptoms of or susceptibility to multifactorial

CC disease of which a component is or may be genetic such as autoimmune

CC diseases, including, rheumatoid arthritis, multiple sclerosis,

CC inflammation, cancer, nervous system diseases and infection by pathogenic

CC microorganism. The method is also useful in forensic investigations and
 CC paternity analysis. The present sequence represents a PCR primer specific
 CC for a human SNP containing DNA sequence

XX SQ Sequence 18 BP; 3 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 420 GGCCTGAAACGTGAGG 436
 DB 18 GGCCTGAAACTTGAGG 2

RESULT 1593
 ABQ81304
 ID ABQ81304 standard; DNA; 18 BP.
 XX AC ABQ81304;
 XX DT 12-DEC-2002 (first entry)
 XX CYtochrome P450 CYP2A6 sense primer.
 XX CYtochrome P450; CYP2A6; enzyme; tachyphylaxis; drug tolerance; human;
 KW psoriasis; antipsoriatic; antipruritic; dermatological; PCR; primer; ss.
 XX OS Homo sapiens.
 XX WO200245704-A2.
 XX 13-JUN-2002.

XX 04-DEC-2001; 2001WO-GB005369.
 XX 04-DEC-2000; 2000GB-00029524.
 XX (MOLE-) MOLECULAR SKINCARE LTD.
 XX Adcocks C, Bavik C, Cork M, Duff G, Tazi-Ahmini R, Ward S;
 XX WPI; 2002-713234/77.

XX Alleviating or preventing a tachyphylactic response to an agent and
 PT treating psoriasis, comprises administering an antagonist of a metabolic
 PT enzyme, which is induced as a result of exposure to the agent, to a
 PT patient.

PS Example 1; Page 75; 136pp; English.

XX The present sequence is a sense primer for cytochrome P450 CYP2A6. RT-PCR
 CC was used to characterise metabolic enzyme induction by vitamin D
 CC analogues, corticosteroids and macrolactams in human skin. The invention
 CC provides for the use of antagonists of P450 enzymes for the prevention or
 CC alleviation of a tachyphylactic response to administration of a vitamin D
 CC analogue, corticosteroid or macrolactam to a patient, e.g. for the
 CC treatment of psoriasis. The underlying cause of tachyphylaxis was shown
 CC to be degradation of a drug in the patient, rather than desensitization
 CC or receptor down-regulation. Exposure of a patient to the drug for
 CC extended periods results in an increase in the expression of enzymes
 CC which are capable of metabolizing the drug. A method for treatment of
 CC tachyphylaxis therefore involves inhibiting the induced metabolic enzyme,
 CC especially a P450 cytochrome, by administration of an antagonist of the
 CC enzyme. Detection of an increase in the amount and/or activity of a
 CC metabolic enzyme capable of metabolizing a drug following extended
 CC exposure of a cell from an individual to the drug indicates the increased
 CC likelihood of that individual developing a tachyphylactic response to the
 CC drug

XX Sequence 18 BP; 8 A; 2 C; 8 G; 0 T; 0 U; 0 Other;
 XX Query Match 0.6%; Score 15.4; DB 1; Length 18;

Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 700 AGCAGAGGAAGAACAG 716
 DB 1 AGCAGAGGAAGAACAG 17

RESULT 1584
 AEC52846
 ID AEC52846 standard; DNA; 18 BP.
 XX AC AEC52846;
 XX DT 17-NOV-2005 (first entry)
 XX Antisense oligonucleotide targeting human TGF-beta-3 #1244.
 XX Transforming growth factor beta; TGF-beta-3; antisense therapy;
 KW antisense oligonucleotide; ss; cancer; cytostatic.

XX OS Homo sapiens.
 XX WO2005084712-A2.
 XX 15-SEP-2005.
 XX 28-FEB-2005; 2005WO-EP002101.
 XX 27-FEB-2004; 2004EP-00004478.
 XX 01-APR-2004; 2004US-0558135P.
 XX (ANTI-) ANTISENSE PHARMA GMBH.
 XX Schlingensiepen K, Schlingensiepen R, Jachimczak P, Stauder G;
 PI Bischof A, Hafner M, Egger T;
 XX WPI; 2005-630685/54.

XX New antisense oligonucleotides inhibiting the synthesis of proteins
 PT involved in the formation of metastases such as transforming growth
 PT factor-beta 1 (TGF-beta 1), TGF-beta 2 and TGF-beta 3, useful for
 PT treating cancer.

PS Claim 4; Page 72; 106pp; English.
 CC The invention relates to an antisense oligonucleotide or its active
 CC derivative selected from AEC46374-AEC46395, targeting human interleukin-
 CC 10 (IL-10). Also included are a process of manufacturing the antisense
 CC oligonucleotide (or its active derivative, by adding consecutive
 CC nucleosides and linker stepwise or by cutting the oligonucleotide out of
 CC longer oligonucleotide chain), a pharmaceutical composition comprising a
 CC the antisense oligonucleotide and a TGF-beta 2 antagonist for preparing a
 CC composition for treating cancer. The oligonucleotide is an antisense
 CC oligonucleotide inhibiting the synthesis of proteins involved in the
 CC formation of metastases. The oligonucleotide is an antisense
 CC oligonucleotide inhibiting the production of transforming growth factor
 CC (TGF)-beta 1, TGF-beta 2, TGF-beta 3, cell-cell adhesion molecules
 CC (CAVMS), integrins, selectins, metalloproteinases (MMPs), their tissue
 CC inhibitors (TIMPs) and/or interleukins 10. The oligonucleotides are
 CC useful for the preparation of a pharmaceutical composition for inhibiting
 CC the formation of metastases in cancer treatment. The oligonucleotides are
 CC useful for treating cancer, e.g. bile duct carcinoma, bladder carcinoma,
 CC brain tumor, breast cancer, bronchogenic carcinoma, carcinoma of the
 CC kidney, cervical cancer, choriocarcinoma, cystadenocarcinoma, cervical
 CC carcinoma, colon carcinoma, colorectal carcinoma, esophageal cancer, gall bladder
 CC endometrial cancer, epithelial carcinoma, hepatocellular cancer,
 CC cancer, gastric cancer, head and neck cancer, hepatocellular cancer,
 CC liver carcinoma, lung carcinoma, medullary carcinoma, non-small cell
 CC bronchogenic/lung carcinoma, ovarian cancer, pancreas carcinoma,
 CC papillary carcinoma, papillary adenocarcinoma, prostate cancer, small
 CC intestine carcinoma, rectal cancer, renal cell carcinoma, sebaceous gland
 CC carcinoma, skin cancer, soft tissue cancer, squamous cell carcinoma,

CC testicular carcinoma, uterine cancer, acoustic neuromas, neurofibromas,
 CC trachomas, and pyogenic granulomas; pre-malignant tumors, blastoma,
 CC Ewing's tumor, craniopharyngioma, ependymoma, medulloblastoma,
 CC hemangioblastoma, medulloblastoma, melanoma, mesothelioma, neuroblastoma,
 CC neurofibroma, pinealoma, retinoblastoma, sarcoma, seminoma, trachomas,
 CC Wilm's tumor and/or myeloma, multiple. The present sequence is an
 CC antisense oligonucleotide targeting human TGF-beta-3.
 XX
 SQ Sequence 18 BP; 5 A; 7 C; 6 G; 0 T; 0 U; 0 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1204 CAGCCGGCCAGGACCA 1220
 ||||| ||||| ||||| |||||
 Db 1 CAGCAGGGCCAGGACCA 17
 RESULT 1585
 AEC52706
 ID AEC52706 standard; DNA; 18 BP.
 XX
 AC AEC52706;
 XX
 DT 17-NOV-2005 (first entry)
 XX
 DE Antisense oligonucleotide targeting human TGF-beta-3 #1104.
 XX
 KW Transforming growth factor beta; TGF-beta-3; antisense therapy;
 KW antisense oligonucleotide; ss; cancer; cytostatic.
 XX
 OS Homo sapiens.
 XX
 PN W02005084712-A2.
 XX
 PD 15-SEP-2005.
 XX
 PF 28-FEB-2005; 2005WO-EP002101.
 XX
 PR 27-FEB-2004; 2004EP-00004478.
 PR 01-APR-2004; 2004US-0558135P.
 XX
 PA (ANTI-) ANTISENSE PHARMA GMBH.
 XX
 PI Schlingensiepen K, Schlingensiepen R, Jachimczak P, Stauder G;
 PI Bischof A, Hafner M, Egger T;
 XX
 DR WPI; 2005-630685/64.
 XX
 PT New antisense oligonucleotides inhibiting the synthesis of proteins
 PT involved in the formation of metastases such as transforming growth
 PT factor-beta 1 (TGF-beta 1), TGF-beta 2 and TGF-beta 3, useful for
 PT treating cancer.
 XX
 PS Claim 4; Page 72; 106pp; English.
 XX
 CC The invention relates to an antisense oligonucleotide or its active
 CC derivative selected from AEC46374-AEC46395, targeting human interleukin-
 CC 10 (IL-10). Also included are a process of manufacturing the antisense
 CC oligonucleotide (or its active derivative, by adding consecutive
 CC nucleosides and linker stepwise or by cutting the oligonucleotide out of
 CC longer oligonucleotide chain), a pharmaceutical composition comprising
 CC the antisense oligonucleotide and a TGF-beta 2 antagonist for preparing a
 CC composition for treating cancer. The oligonucleotide is an antisense
 CC oligonucleotide inhibiting the synthesis of proteins involved in the
 CC formation of metastases. The oligonucleotide is an antisense
 CC oligonucleotide inhibiting the production of transforming growth factor
 CC (TGF)-beta 1, TGF-beta 2, TGF-beta 3, cell-cell adhesion molecules
 CC (CAMs), integrins, selectins, metalloproteases (MMPs), their tissue
 CC inhibitors (TIMPs) and/or interleukins 10. The oligonucleotides are
 CC useful for the preparation of a pharmaceutical composition for inhibiting
 CC the formation of metastases in cancer treatment. The oligonucleotides are

CC useful for treating cancer, e.g. bile duct carcinoma, bladder carcinoma,
 CC brain tumor, breast cancer, bronchogenic carcinoma, carcinoma of the
 CC kidney, cervical cancer, choriocarcinoma, cystadenocarcinoma, cervical
 CC carcinoma, colon carcinoma, colorectal carcinoma, embryonal carcinoma,
 CC endometrial cancer, epithelial carcinoma, esophageal cancer, gall bladder
 CC cancer, gastric cancer, head and neck cancer, hepatocellular cancer,
 CC liver carcinoma, lung carcinoma, medullary carcinoma, non-small cell
 CC bronchogenic/lung carcinoma, ovarian cancer, pancreas carcinoma,
 CC papillary carcinoma, papillary adenocarcinoma, prostate cancer, small
 CC intestine carcinoma, rectal cancer, renal cell carcinoma, sebaceous gland
 CC carcinoma, skin cancer, soft tissue cancer, squamous cell carcinoma,
 CC testicular carcinoma, uterine cancer, acoustic neuromas, neurofibromas,
 CC trachomas, and pyogenic granulomas; pre-malignant tumors, blastoma,
 CC Ewing's tumor, craniopharyngioma, ependymoma, medulloblastoma,
 CC hemangioblastoma, medulloblastoma, melanoma, mesothelioma, neuroblastoma,
 CC neurofibroma, pinealoma, retinoblastoma, sarcoma, seminoma, trachomas,
 CC Wilm's tumor and/or myeloma, multiple. The present sequence is an
 CC antisense oligonucleotide targeting human TGF-beta-3.
 XX
 SQ Sequence 18 BP; 5 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1204 CAGCCGGCCAGGACCA 1220
 ||||| ||||| ||||| |||||
 Db 2 CAGCAGGGCCAGGACCA 18
 RESULT 1586
 AEF69372/c
 ID AEF69372 standard; DNA; 18 BP.
 XX
 AC AEF69372;
 XX
 DT 06-APR-2006 (first entry)
 XX
 DE P. pratense Phl p 1 mutagenic sense PCR primer P 1-18'.
 XX
 KW ss; Phl p 1; allergen; immunoglobulin E; t-lymphocyte; vaccine;
 KW veterinary; Antiallergic; Hyposensitization; mutagenesis; PCR; primer.
 XX
 OS Phleum pratense.
 OS Synthetic.
 XX
 PN W02006008018-A1.
 XX
 PD 26-JAN-2006.
 XX
 PF 11-JUL-2005; 2005WO-EP007481.
 XX
 PR 21-JUL-2004; 2004DE-10035337.
 XX
 PA (MERE) MERCK PATENT GMBH.
 XX
 PI Fiebig H, Wald M, Nandy A, Kahlert H, Weber B, Cromwell O;
 XX
 DR WPI; 2006-154795/16.
 XX
 PT New variants of group 1 grass pollen allergens, useful for treatment or
 PT prevention of allergy, have reduced immunoglobulin E reactivity while
 PT retaining T cell reactivity, also new DNA encoding them.
 XX
 PS Example 1; SEQ ID NO 19; 72pp; German.
 XX
 CC This invention describes novel hypoallergenic variants of group 1
 CC allergens of Poaceae that have reduced immunoglobulin E (IgE) reactivity
 CC compared with the wild-type allergens but essentially retained reactivity
 CC with T lymphocytes. The invention also describes; a) DNA molecules that
 CC encode the variant allergens; b) a recombinant expression vector
 CC containing DNA encoding the variant allergens functionally linked to an
 CC expression control sequence; c) a host organism transformed with DNA

CC encoding the variant allergens or the expression vector and d) preparing
 CC allergen variants by growing the novel host organisms. The Poaceae group
 CC 1 allergen variants are derived from Phleum pratense; Lolium perenne; Poa
 CC pratensis; Holcus lanatus; Cynodon dactylon; Oryza sativa or Phalaris
 CC aquatica. Several specific amino acid variants are described; e.g. a) the
 CC mature Phl p 1 protein lacking Cys residues at positions 41, 57, 69, 72,
 CC 77, 83 and 139, or these Cys residues replaced by some other amino acid
 CC (specifically Ser) or b) lacking at least one of the regions 1-6; 1-30;
 CC 92-104; 115-119; 175-185 or 213-220. cDNA of wild-type Phl p 1 was
 CC amplified by PCR from total pollen cDNA and a variant in which all 7 Cys
 CC were replaced by Ser was produced by amplification and assembly of
 CC fragments. Deleted versions of this were produced by PCR using primers
 CC that introduce the appropriate truncations. The various allergy variants
 CC are expressed as His fusion products in Escherichia coli and tested
 CC (after immobilization on nitrocellulose) for binding of IgE, isolated
 CC from sera of patients allergic to grass pollen. Reduced IgE binding was
 CC confirmed in an IgE inhibition test and from reduced activation of
 CC basophilic granulocytes. The allergen variants retain T cell activating
 CC properties as shown in a proliferation test on allergen-specific T
 CC lymphocytes from allergic subjects. The variant allergens, encoding DNA
 CC and recombinant expression vectors containing encoding DNA, are useful
 CC for treatment and prevention of allergies induced by Poaceae group 1
 CC allergens, especially as vaccines in human or veterinary medicine. This
 CC sequence represents a mutagenic PCR primer used to create the mutant
 CC Phleum pratense allergens, Phl p 1 NoCys, Phl p 1 NoCys delta213-220, and
 CC Phl p 1 NoCys delta1-6, 115-119, 213-220 from Phleum pratense.
 XX
 SQ Sequence 18 BP; 3 A; 8 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 381 GCGGGACCTCGGGAT 397
 DB 17 GCGGGACCTCGGGAT 1

RESULT 1587
 AEF93735/c
 ID AEF93735 standard; DNA; 18 BP.
 XX
 AC AEF93735;
 XX
 DT 20-APR-2006 (first entry)
 XX
 DE Human chromosome 19q r region SNP containing region primer #22.
 XX
 KW SNP detection; prognosis; chromosome 19; r region; ss; PCR; primer.
 XX
 OS Homo sapiens.
 XX
 PN WO2006018023-A2.
 XX
 PD 23-FEB-2006.
 XX
 PF 17-AUG-2005; 2005WO-DK000529.
 XX
 PR 18-AUG-2004; 2004DK-00001249.
 PR 23-FEB-2005; 2005DK-00000274.
 PR 22-JUN-2005; 2005DK-00000918.
 XX
 PA (UYAA-) UNIV AARHUS.
 PA (ARBE-) ARBEJDSMILJOINSTITUTET.
 XX
 PI Nexø BA, Vogel UB, Borglum A;
 XX
 DR WPI; 2006-173654/18.
 XX
 PT Estimating disease risk of an individual, by assessing a sequence
 PT polymorphism, obtaining a sequence polymorphism response and estimating
 PT disease risk of individual based on the sequence polymorphism response.
 XX

PS Example; Page 68; 139pp; English.
 XX
 CC The invention relates to a method of estimating the disease risk of an
 CC individual which comprises assessing in the genetic material a sequence
 CC polymorphism, obtaining a sequence polymorphism response, and estimating
 CC the disease risk of the individual based on the sequence polymorphism
 CC response. The methods are useful for estimating the disease risk of an
 CC individual comprises, estimating the disease prognosis of an individual
 CC and estimating a treatment response of an individual suffering from
 CC cancer to a disease treatment. The methods can be used for identifying
 CC subjects with increased risk of having or developing cancer. The present
 CC sequence represents a human chromosome 19q r region PCR primer.
 XX
 SQ Sequence 18 BP; 4 A; 9 C; 1 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 15.4; DB 1; Length 18;
 Best Local Similarity 94.1%; Pred. No. 1.2e+03;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1825 GGAGAAGGAGGTTGCAG 1841
 DB 18 GGAGATGGAGGTTGCAG 2
 RESULT 1588
 AEF93897/c
 ID AEF93897 standard; DNA; 18 BP.
 XX
 AC AEF93897;
 XX
 DT 20-APR-2006 (first entry)
 XX
 DE Human chromosome 19q r region SNP containing region oligo #58.
 XX
 KW SNP detection; prognosis; chromosome 19; r region; ss; probe; primer;
 KW PCR.
 XX
 OS Homo sapiens.
 XX
 PN WO2006018023-A2.
 XX
 PD 23-FEB-2006.
 XX
 PF 17-AUG-2005; 2005WO-DK000529.
 XX
 PR 18-AUG-2004; 2004DK-00001249.
 PR 23-FEB-2005; 2005DK-00000274.
 PR 22-JUN-2005; 2005DK-00000918.
 XX
 PA (UYAA-) UNIV AARHUS.
 PA (ARBE-) ARBEJDSMILJOINSTITUTET.
 XX
 PI Nexø BA, Vogel UB, Borglum A;
 XX
 DR WPI; 2006-173654/18.
 XX
 PT Estimating disease risk of an individual, by assessing a sequence
 PT polymorphism, obtaining a sequence polymorphism response and estimating
 PT disease risk of individual based on the sequence polymorphism response.
 XX
 PS Claim 60; Page 98; 139pp; English.
 XX
 CC The invention relates to a method of estimating the disease risk of an
 CC individual which comprises assessing in the genetic material a sequence
 CC polymorphism, obtaining a sequence polymorphism response, and estimating
 CC the disease risk of the individual based on the sequence polymorphism
 CC response. The methods are useful for estimating the disease risk of an
 CC individual comprises, estimating the disease prognosis of an individual
 CC and estimating a treatment response of an individual suffering from
 CC cancer to a disease treatment. The methods can be used for identifying
 CC subjects with increased risk of having or developing cancer. The present
 CC sequence represents a human chromosome 19q r region primer/probe.
 XX


```

SQ Sequence 18 BP; 4 A; 9 C; 1 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 15.4; DB 1; Length 18;
Best Local Similarity 94.1%; Pred. No. 1.2e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1825 GGAGAGGAGGTTGCAG 1841
Db 18 GGAGATGGAGGTTGCAG 2

RESULT 1589
AAH40922/C
ID AAH40922 standard; DNA; 19 BP.
XX AC AAH40922;
XX DT 14-AUG-2001 (first entry)
XX DE SNP specific lower PCR primer SEQ ID 3718.
XX KW Single nucleotide polymorphism; SNP; single nucleotide primer extension;
KW SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
KW Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
KW polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
KW acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
KW inflammation; forensic investigation; paternity analysis; PCR primer; ss.
XX OS Homo sapiens.
XX PN WQ200129262-A2.
XX PD 26-APR-2001.
XX PF 13-OCT-2000; 2000WO-US028436.
XX PR 15-OCT-1999; 99US-0160096P.
XX PA (ORCH-) ORCHID BIOSCIENCES INC.
XX PI Picoult-Newburg L, Pohl M;
XX DR WPI; 2001-290930/30.
XX PT New genotyping oligonucleotide, useful for detecting the presence,
PT absence or identity of single polynucleotide polymorphism in a nucleic
PT acid sample.
XX PS Claim 1; Page 68; 83pp; English.
XX CC Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
CC primer extension (SNPE) primers, and the sequences of regions flanking
CC sites of single nucleotide polymorphisms SNPs. The present invention
CC includes kits for determining the presence or absence of a SNP, using the
CC oligonucleotides of the invention. The PCR primers are used to amplify a
CC SNP flanking sequence, the SNPE primer is used as a genotyping primer.
CC The oligonucleotides are useful for genotyping a nucleic acid sample by
CC performing a single-nucleotide primer extension reaction. The
CC oligonucleotides are useful for determining the presence, absence or
CC identity of a SNP and for genotyping nucleic acid samples, for e.g. to
CC assess by association analysis the genotype of an individual or group of
CC individuals, having a pathological phenotypic trait suspected of being
CC caused by one or more SNPs. Phenotypic traits include diseases e.g.
CC agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
CC osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
CC traits also include symptoms of or susceptibility to multifactorial
CC disease of which a component is or may be genetic such as autoimmune
CC diseases, including, rheumatoid arthritis, multiple sclerosis,
CC inflammation, cancer, nervous system diseases and infection by pathogenic
CC microorganism. The method is also useful in forensic investigations and
CC paternity analysis. The present sequence represents a PCR primer specific
CC for a human SNP containing DNA sequence

XX SQ Sequence 19 BP; 4 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.3e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2460 CCTCACCACGACTTC 2476
Db 18 CCTTCCACGACTTC 2

RESULT 1590
ADC49403
ID ADC49403 standard; DNA; 19 BP.
XX AC ADC49403;
XX DT 18-DEC-2003 (first entry)
XX DE Cytochrome P450 gene-specific PCR primer #14.
XX KW Cytochrome P450 1 A1; cytochrome P450 B10; toxicity estimation; PCR;
KW primer; expression analysis; ss.
XX OS Unidentified.
XX PN JP2003093073-A.
XX PD 02-APR-2003.
XX PF 26-SEP-2001; 2001JP-00295111.
XX PR 26-SEP-2001; 2001JP-00295111.
XX PA (TOKE ) TOSHIBA KK.
XX DR WPI; 2003-817307/77.
XX PT New oligonucleotide useful for analyzing expression of cytochrome P450 1
PT A1 gene and cytochrome P450 B10 gene, and estimating toxicity of test
PT agent.
XX PS Claim 1; SEQ ID NO 14; 29pp; Japanese.
XX CC The invention comprises primers for analysing the expression of
CC cytochrome P450 1 A1 gene and cytochrome P450 B10 gene, and estimating
CC the toxicity of a test agent. The PCR primers of the invention are useful
CC for analysing tan expression of cytochrome P450 1 A1 gene and P450 2B10
CC gene and estimating the toxicity of a test agent. The present DNA
CC sequence represents a PCR primer of the invention.
XX SQ Sequence 19 BP; 7 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.3e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 916 CTATGCTACCGAAG 932
Db 3 CTATGCTACAGAAAG 19

RESULT 1591
ADP47937
ID ADP47937 standard; RNA; 19 BP.
XX AC ADP47937;
XX DT 12-FEB-2004 (first entry)
XX DE Human Myc transcript target sequence/siNA upper strand, SEQ ID 74.
XX
```

KW Human; Myc; Myb; cancer; proliferative disease; restenosis;
KW polycystic kidney disease; RNA interference;
KW short interfering nucleic acid; siNA; short interfering RNA; siRNA;
KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
KW expression modulation; gene therapy; drug screening; diagnosis;
KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; cytostatic; vasotropic;
KW nephrotropic; ss.
XX
XX Homo sapiens.
OS
XX WO2003070917-A2.
XX
XX 28-AUG-2003.
XX
XX 20-FEB-2003; 2003WO-US005326.
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-OCT-2002; 2002US-0418655P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J, Beigelman L;
XX WPI; 2003-689784/65.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of Myc or Myb genes.
XX
XX Example 7; Page 128; 161pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human Myc or Myb genes by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the Myc or Myb genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
CC used for treating cancers and other proliferative diseases, such as
CC restenosis and polycystic kidney disease. The siNAs are also useful for
CC drug screening, diagnosis, therapeutic target identification and
CC validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the upper strand of a human Myc-targeted
CC double-stranded siNA, which is identical to the Myc transcript target
CC sequence.
XX
XX Sequence 19 BP; 9 A; 1 C; 8 G; 0 T; 1 U; 0 Other;
SQ

Query Match 0.6%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.3e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 704 GAGGAGACACAGAGA 720
||||| |||||||
DB 1 GAGGAGGACACAGAGA 17

RESULT 1592

ADP48055/c
ID ADP48055 standard; RNA; 19 BP.
XX
AC ADP48055;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human Myc siNA lower strand, SEQ ID 192.
XX
XX Human; Myc; Myb; cancer; proliferative disease; restenosis;
KW polycystic kidney disease; RNA interference;
KW short interfering nucleic acid; siNA; short interfering RNA; siRNA;
KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
KW expression modulation; gene therapy; drug screening; diagnosis;
KW therapeutic target identification; pharmacogenomics;
KW gene function analysis; gene mapping; cytostatic; vasotropic;
KW nephrotropic; ss.
XX
XX Homo sapiens.
OS
XX WO2003070917-A2.
PN
XX 28-AUG-2003.
PD
XX 20-FEB-2003; 2003WO-US005326.
PF
XX
XX 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-OCT-2002; 2002US-0418655P.
PR 15-JAN-2003; 2003US-0440129P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J, Beigelman L;
XX WPI; 2003-689784/65.
XX
XX New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer, downregulates expression of Myc or Myb genes.
XX
XX Example 7; Page 128; 161pp; English.
XX
XX The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human Myc or Myb genes by RNA
CC interference. The siNAs may or may not comprise ribonucleotides and may
CC be double or single stranded. They further comprise sense and antisense
CC regions, or alternatively are assembled from a sense oligonucleotide and
CC an antisense oligonucleotide. Specifically, the siNAs include short
CC interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
CC hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified,
CC can contain deoxyribonucleotides, and can be chemically synthesised,
CC expressed from a vector or enzymatically synthesised. The invention also
CC relates to kits for the in vitro or in vivo delivery of siNA; conjugates
CC and/or complexes of siNA; and vectors that express siNA. The siNAs are
CC used to modulate expression of the Myc or Myb genes in cells, tissue
CC explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
CC transplants for the treatment of a variety of conditions. They may be
CC used for treating cancers and other proliferative diseases, such as
CC restenosis and polycystic kidney disease. The siNAs are also useful for
CC drug screening, diagnosis, therapeutic target identification and
CC validation, genetic engineering, pharmacogenomics, studying gene
CC function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC The present sequence represents the upper strand of a human Myc-targeted
CC double-stranded siNA, which is identical to the Myc transcript target
CC sequence.
XX
XX Sequence 19 BP; 1 A; 8 C; 1 G; 0 T; 9 U; 0 Other;
SQ

Query Match 0.6%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.3e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 704 GAGGAGGACCAAGAAGA 720
Db 19 GAGGAGGACCAAGAAGA 3

RESULT 1593
ADL25335/C
ID ADL25335 standard; DNA; 19 BP.
XX
AC ADL25335;
XX
XX 20-MAY-2004 (first entry)
XX
XX Intestinal epithelium/peyer's patch M cell-associated PCR primer #480.
XX
KW intestinal epithelium cell development; peyer's patch M cell development;
KW inflammatory bowel disease; Glutenteropathy; infectious disease;
KW autoimmune disease; haemolytic anaemia; rheumatoid arthritis; dermatitis;
KW Grave's disease; multiple sclerosis; allergy; asthma; diabetic mellitus;
KW immune system disorder; hypersensitivity; anaphylaxis;
KW blood group incompatibility; ss; PCR; primer.
XX
OS Macaca fascicularis.
XX
PN WO200280852-A2.
XX
XX 17-OCT-2002.
XX
XX 04-APR-2002; 2002WO-US010873.
XX
XX 04-APR-2001; 2001US-0281416P.
XX
XX (DIGI-) DIGITAL GENE TECHNOLOGIES INC.
XX
XX Brayden DJ, Byrne D, O'mahony DJ, Evans CF, Mah SP, Lo DD;
XX WPI; 2003-075470/07.
XX
XX Novel isolated or purified polypeptide encoded by genes associated with
XX intestinal epithelium or M cell development, differentiation or function,
XX useful for treating autoimmune diseases and infectious diseases.
XX
XX Disclosure; SEQ ID NO 845; 152pp; English.
XX
XX The invention comprises DNA sequences which are associated with
XX intestinal epithelium and peyer's patch M cells. The DNA sequences of the
XX invention are useful for assessing, modifying, modulating or regulating
XX intestinal epithelium or M cell development. The DNA sequences of the
XX invention are also useful in the treatment of: inflammatory bowel
XX disease, glutenteropathy, infectious diseases, autoimmune diseases
XX (e.g. haemolytic anaemia, rheumatoid arthritis, dermatitis, Grave's
XX disease, multiple sclerosis, allergy, asthma and diabetic mellitus),
XX diseases or disorders of the immune system, hypersensitivity,
XX anaphylaxis, and blood group incompatibility. The present DNA sequence
XX represents a PCR primer that was used to amplify an intestinal
XX epithelium/peyer's patch M cell-associated DNA sequence of the invention.
XX
XX Sequence 19 BP; 4 A; 10 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.3e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1825 GGAGAGGAGGTTGCAG 1841
Db 17 GGAGATGGAGGTTGCAG 1

RESULT 1594
ADL16519/C
ID ADL16519 standard; DNA; 19 BP.

XX
XX ADO16519;
XX
XX 29-JUL-2004 (first entry)
XX
XX 4 synthesis-period of neuroblastoma related primer, SEQ ID 781.
XX
XX Human; 4 synthesis-period; neuroblastoma; stage 4S; primer; ss.
XX
XX Synthetic.
XX
XX WO2004039975-A1.
XX
XX 13-MAY-2004.
XX
XX 30-OCT-2003; 2003WO-JP013932.
XX
XX 30-OCT-2002; 2002JP-00316586.
XX
XX (HISM ) HISAMITSU PHARM CO LTD.
XX (CHIB-) CHIBA PREFECTURE.
XX
XX Nakagawara A, Ohira M;
XX WPI; 2004-390323/36.
XX
XX Novel nucleic acid obtained from 4 synthesis-period of neuroblastoma
XX cells useful for prognosing and determining progress stage of
XX neuroblastomas.
XX
XX Claim 8; SEQ ID NO 781; 455pp; Japanese.
XX
XX The present invention relates to human nucleic acid sequences (I;
XX ADO15739-ADO15912) obtained from 4 synthesis-period (stage 4S) of
XX neuroblastoma cell. (I) is useful for prognosing and determining the
XX progress stage of 4 synthesis-period of neuroblastoma. The present
XX sequence is a primer, used to illustrate the invention.
XX
XX Sequence 19 BP; 8 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 15.4; DB 1; Length 19;
Best Local Similarity 94.1%; Pred. No. 1.3e+03;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 903 TGGCTGTGGTGTCTAT 919
Db 17 TGGCTGTGGTGTCCAT 1

RESULT 1595
ADT64925/C
ID ADT64925 standard; RNA; 19 BP.
XX
AC ADT64925;
XX
XX 13-JAN-2005 (first entry)
XX
XX SARS coronavirus siRNA lower sequence 177.
XX
XX SARS; severe acute respiratory syndrome; siRNA; short interfering RNA;
XX ss; RNA interference; gene silencing; SARS virus infection;
XX acute respiratory failure; viral pneumonia.
XX
XX SARS coronavirus.
XX
XX WO2004092383-A2.
XX
XX 28-OCT-2004.
XX
XX 13-APR-2004; 2004WO-US011320.
XX
XX 15-APR-2003; 2003US-0462874P.
XX
XX 30-APR-2003; 2003US-00427160.
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PR	23-MAY-2003; 2003US-00444853.
PR	23-OCT-2003; 2003US-00693059.
PR	24-NOV-2003; 2003US-00720448.
PR	14-JAN-2004; 2004US-00757803.
XX	(SIRN-) SIRNA THERAPEUTICS INC.
XX	
XX	Mcswiggen J, Bharat C, Haerberli P;
XX	WPI; 2004-766879/75.
XX	
PT	Novel chemically synthesized double stranded short interfering nucleic
PT	acid molecule directing cleavage of severe acute respiratory syndrome
PT	virus RNA through RNA interference, useful for treating viral infection.
XX	
PS	Example 3; SEQ ID NO 1828; 219pp; English.
XX	
CC	The invention relates to a chemically synthesised double stranded short
CC	interfering ribonucleic acid (siRNA) molecule directing cleavage of
CC	severe acute respiratory syndrome (SARS) virus RNA through RNA
CC	interference, comprising a strand having nucleotide sequence with
CC	sufficient complementarity to the SARS virus RNA to direct cleavage of
CC	the SARS virus RNA through RNA interference, where the siRNA does not
CC	require the presence of nucleotides having a 2'-hydroxy group for
CC	mediating RNA interference, and each strand of is 19-23 nucleotides in
CC	length. The siRNA is useful for modulating the expression of genes of
CC	associated with the development or maintenance of SARS virus infection,
CC	acute respiratory failure, viral pneumonia and/or disease states
CC	associated with SARS virus infection, and for treating SARS virus
CC	infection, acute respiratory failure, viral pneumonia and/or disease
CC	states associated with SARS virus infection by preventing the
CC	transcript of SARS gene. The siRNA is useful in diagnosis, and
CC	treatment of diseases and conditions the respond to the modulation of
CC	SARS virus gene expression and/or activity. The siRNA is useful in
CC	therapeutic, diagnostic, target validation, genomic discovery, genetic
CC	engineering, and pharmacogenomic applications. The siRNA is stable and
CC	capable of mediating RNA interference against SARS inside a cell or
CC	reconstituted in vitro system, and has high degree of specificity with
CC	respect to SARS RNA expression. The present sequence is a lower strand of
CC	a double stranded siRNA of the invention.
XX	
XX	
XX	Sequence 19 BP; 0 A; 8 C; 1 G; 0 T; 10 U; 0 Other;
XX	
QY	Query Match 0.6%; Score 15.4; DB 1; Length 19;
DB	Best Local Similarity 94.1%; Pred. No. 1.3e+03;
	Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0
QY	695 GAAGACGACGACGAGAGA 711
DB	18 GAAGACGACGACGAGAGA 2
RESULT 1596	
ADT63274	
ID	ADT63274 standard; RNA; 19 BP.
XX	
AC	ADT63274;
XX	
DT	13-JAN-2005 (first entry)
XX	
DE	SARS coronavirus siRNA upper sequence 177.
XX	
XX	SARS; severe acute respiratory syndrome; siRNA; short interfering RNA;
KW	ss; RNA interference; Gene silencing; SARS virus infection;
KW	acute respiratory failure; viral pneumonia.
XX	
OS	SARS coronavirus.
XX	
PN	WO2004092383-A2.
XX	
PD	28-OCT-2004.
XX	
PF	13-APR-2004; 2004WO-US011320.

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XX PF 15-JUL-1999; 99JP-00201279.
XX PR 15-JUL-1999; 99JP-00201279.
XX PA (SAKA ) OTSUKA PHARM CO LTD.
XX DR WPI; 2001-303742/32.
XX TSAT7005 gene, encoding a polypeptide useful for the diagnosis and
PT treatment of diseases associated with its expression.
XX Example 1; Page 24; 25pp; Japanese.
XX
CC The present sequence represents a PCR primer which is used in an example
CC from the present invention for the isolation of human TSA7005 gene. The
CC human TSA7005 protein shares 32% homology with human and mouse Reg
CC proteins, and 34% homology with the rat Reg protein. TSA7005 has
CC pancreatic beta cell growth activity and hypoglycaemic activity. The
CC TSA7005 protein can be used for the diagnosis and treatment of diseases
CC associated with the gene and its expression product
XX
SQ Sequence 16 BP; 1 A; 0 C; 0 G; 14 T; 0 U; 1 Other;
Query Match 0.6%; Score 15.2; DB 1; Length 16;
Best Local Similarity 93.8%; Pred. No. 1.2e+03;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 2708 TAAAAAATAAAAAAAAAA 2723
Dy 16 TAAAAAATAAAAAAAAAA 1
RESULT 1598
AA18388/c
ID AA18388 standard; DNA; 17 BP.
AC AA18388;
XX
XX 11-MAY-1999 (first entry)
XX RT-PCR primer of the invention SEQ ID 29.
XX RT-PCR primer; DNA sequence determination; gene sequence analysis; ss.
XX Synthetic.
XX JP11032765-A.
XX 09-FEB-1999.
XX
XX 18-JUL-1997; 97JP-00208312.
XX 18-JUL-1997; 97JP-00208312.
XX (TAKI ) TAKARA SHUZO CO LTD.
XX WPI; 1999-183822/16.
XX
XX Peptides having at least two new nucleotides - useful as primers in RT-
PT PCR.
XX
XX Example 1; Page 12; 19pp; Japanese.
XX
XX This sequence represents a primer of the invention. The invention relates
XX to sequences of at least two nucleotides of formula: (X)m5'-(alpha)n-beta
XX -N3'; or (X)m5'-(gamma)k-delta-N3'; where X = a labelled compound and/or
XX a nucleotide with voluntary sequence; m = 0 or 1; alpha = thymine; n =
XX natural number indicating the repetition of alpha; beta, delta = V or N;
XX V = adenine, guanine or cytosine; N = adenine, guanine, cytosine or
XX thymine; gamma = thymine; k = natural number of 3 or over indicating the
XX repetition of gamma, in which thymine expressed by gamma is composed of
XX 1/3 or less of adenine, guanine and/or cytosine. The new nucleotides are

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```

CC useful as primers for RT-PCR and determination of base sequences. The new
CC sequences allow for reproductive and highly efficient analysis of gene
CC sequences
XX
SQ Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;
Query Match 0.6%; Score 15.2; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.2e+03;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 2708 TAAAAAATAAAAAAAAAA 2723
Dy 16 BAAAAAATAAAAAAAAAA 1
RESULT 1599
AA18388/c
ID AA18388 standard; DNA; 17 BP.
AC AA18388;
XX
XX 18-DEC-2001 (first entry)
XX Modified Poly-T Primer #1 used in construction of probe sets.
XX WRAP-Probe; gene expression array; global amplification; RNA array; ss;
XX tissue microarray; drug discovery assay; reporter binding site; forensic;
XX diagnostic; genomic analysis; universal linker; poly-T primer.
XX Synthetic.
XX WO200166802-A1.
XX 13-SEP-2001.
XX
XX 09-MAR-2001; 2001WO-US007508.
XX 09-MAR-2000; 2000US-0187982P.
XX (GENE-) GENETAG TECHNOLOGY INC.
XX Shafer DA;
XX WPI; 2001-596845/67.
XX
XX Novel probe sets with common universal linkers at one or both ends (WRAP
PT probes) for gene expression arrays to provide global amplification of
PT probe set and to provide common equivalent signaling regardless of
PT length.
XX
XX Disclosure; Page 88; 97pp; English.
XX
XX The invention relates to a probe set for gene expression arrays to
XX provide common equivalent signalling per probe and global amplification
XX of the set. The probe set has a pool of modified cDNA probes, each probe
XX having a central target specific segment copied from a portion of a
XX single mRNA transcript and a universal linker (a WRAP-Probe) located on
XX one or both terminal ends. The universal linker has reporter binding
XX sites to join common reporters to the probes and primer binding sites to
XX copy and amplify the probe. The probes and reporters are useful in
XX diagnostic or drug discovery assays for a wide range of biomedical
XX samples, including detection of nucleic acids and gene expression
XX profiles in human diagnostics, forensics and genomic analysis. The
XX methods are useful for amplifying and identifying any unknown DNA
XX fragment and also for improving sensitivity with tissue microarrays or
XX RNA arrays. The methods improve the quantification of gene expression and
XX allow highly improved detection of rare transcripts or very small
XX samples. This sequence represents a poly-T primer used in the
XX construction of probe sets
XX
XX Sequence 17 BP; 0 A; 0 C; 0 G; 15 T; 0 U; 2 Other;
Query Match 0.6%; Score 15.2; DB 1; Length 17;

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Tue Nov 7 10:41:34 2006

Best Local Similarity 93.8%; Pred. No. 1.2e+03;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAA 2723
:|||||
Db 16 BAAAAAATAAAAAA 1

RESULT 1600
ADM11779/c
ID ADM11779 standard; DNA; 19 BP.
XX
AC ADM11779;
XX
DT 20-MAY-2004 (first entry)
XX
DE Environmental pollutant method-related oligo dt PCR primer.
XX
KW aromatic compound; gene expression alteration;
KW environmental pollutant analysis; ss; oligo dt; PCR; primer.
XX
OS Unidentified.
XX
PN JP2004049103-A.
XX
PD 19-FEB-2004.
XX
PF 19-JUL-2002; 2002JP-00210632.
XX
PR 19-JUL-2002; 2002JP-00210632.
XX
PA (WARI/) WARIISHI H.
PA (KUBI) KUBOTA CORP.
XX
WPI; 2004-232127/22.
XX
PT Novel genes of eukaryotic microorganism belonging to Phanerochaete genus,
PT and exhibiting change in expression of behavior in presence of aromatic
PT compound, is useful for analyzing environmental pollutant.
XX
PS Example 1; SEQ ID NO 9; 36pp; Japanese.
XX
CC The invention comprises genes from Phanerochaete chrysosporium which
CC exhibit a change in expression in the presence of an aromatic compound.
CC The Phanerochaete chrysosporium genes of the invention are useful for
CC analysing an environmental pollutant. The present DNA sequence represents
CC an oligo dt PCR primer that was used in an example of the invention.
XX
SQ Sequence 19 BP; 0 A; 0 C; 2 G; 15 T; 0 U; 2 Other;

Query Match 0.8%; Score 15.2; DB 1; Length 19;
Best Local Similarity 93.8%; Pred. No. 1.3e+03;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 2708 TAAAAAATAAAAAA 2723
:|||||
Db 18 BAAAAAATAAAAAA 3

Search completed: November 7, 2006, 10:29:14
Job time : 82 secs